

AlgoForce™

E1500

plus

User Manual V4.0.0



Uncover Gold with Ultra-Fine Pulse Induction Technology:
VLF Sensitivity, PI Power, Affordable Excellence!
Designed & Assembled in Australia by ALGOFORCE PTY LTD

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Introduction

Metal detectors serve as indispensable tools for treasure hunters and gold prospectors. They come in two basic types: VLF (very low frequency) and PI (pulse induction), with each technology having its own positive and negative characteristics. In this brief introduction, we will discuss the differences between these two types, and introduce you to the AlgoForce E1500 Plus, a pulse induction metal detector distinguished by its exceptional performance, unique features and cost-effectiveness.

VLF metal detectors are effective at locating relatively shallow gold nuggets in soils with low mineralisation, and their generally lower cost makes them an attractive proposition for novices. However, their performance is drastically reduced as ground mineralisation levels increase, and the presence of hot rocks can quickly turn excitement into frustration.

PI, or Pulse Induction metal detectors generally provide superior performance in mineralised terrains, being able to ignore most of the minerals you don't want to detect. Virtually all serious gold prospectors opt for PI detectors owing to their ability in handling highly mineralised soils, but when it comes to the detection of small gold nuggets, many pulse induction detectors released in the past have often fallen short in sensitivity compared to VLF detectors. Furthermore, most PI detectors come at a much higher price tag compared to their VLF counterparts.

The AlgoForce E1500 Plus is a pulse induction metal detector that excels at locating small gold nuggets in often complex mineralised soils found in most goldfields, all at a remarkably reasonable cost. Developed by AlgoForce Pty Ltd, it harnesses the Ultra-Fine pulse induction technology, which is capable of detecting even the tiniest of gold nuggets. This sensitivity matches that of VLF gold detectors in low mineral soils, but being a PI detector, it has a bigger advantage in highly mineralised terrains. Additionally, the detector incorporates a dual ground balanced detection channel design, to cover all terrain below the coil enabling the detection of nuggets of varying sizes.

For experienced PI users accustomed to estimating nugget size from audio cues, the AlgoForce E1500 Plus can also help to estimate size or conductivity through its stable conductive target ID (0-99), even in highly mineralised soils.

High single frequency VLF detectors typically struggle with signals on wet ocean sand, where PI detectors are far more capable of detecting through the salt mineralisation. Capitalising on its Ultra-Fine pulse induction technology and stable conductive target ID (0-99), the AlgoForce E1500 Plus excels on the beach, proving to be a versatile tool for searching fine jewellery, coins, rings, and other treasures.

With its built-in microphone for ambient sound awareness, real-time scrolling detection signal display, a frequency noise level graph for effortless manual frequency selection, ergonomic and lightweight mechanical design, compatibility with aftermarket coils, the convenience of universal USB power bank support, and an integrated loudspeaker, the AlgoForce E1500 Plus emerges as a robust and user-friendly metal detector. This versatile tool has been carefully engineered to cater to the needs of both amateur gold hunters and seasoned prospectors.

In conclusion, both VLF and PI metal detectors come with their own array of advantages and limitations. The choice between the two hinges on the user's specific requirements and budget. The AlgoForce E1500 Plus bridges the gap, offering a high-performance, cost-effective PI alternative for users seeking a detector that combines VLF's sensitivity to small nuggets and fine jewellery, but with Pulse Inductions ability to detect in mineralised soils and on beaches.

Key Features

Built for Prospectors & Treasure Hunters

The E1500 Plus combines the sensitivity of a VLF with the depth of a PI, designed in Australia for goldfields everywhere. While perfect for prospectors, it also excels for coin and relic hunters, delivering versatile performance on various terrains.

The detector User Interface consists of a 2.7" Black & White LCD screen, 400x240 pixels. The User Interface is fitted with 9 tactile buttons with most having dual functions as per the universal symbols shown on the buttons.

Three User Modes

Standard, Intermediate and Advanced Modes for both entry-level and experienced users, offering flexibility and ease of use. The Standard User Mode has a 7-step Quick Start Guide.

Proprietary Ultra-Fine Pulse Induction Technology

Our Ultra-Fine Pulse Induction technology delivers exceptional sensitivity and stability on mineralised ground and black sands. Three selectable soil types—Hot, Mild, and Beach—optimise performance across a range of conditions, from extreme goldfields to dry sand and saltwater environments.

Extreme EMI Resistance

Use near power lines or in suburban areas with minimal interference. Explore untouched sites with confidence!

Precise Target Identification

Detect gold with fewer digs. Unique on-screen target ID helps you focus on valuable targets. It significantly boosts efficiency in trashy goldfields, making detecting faster, easier, and more productive.

Wide Range of Coil Options

Compatible with GPX 5-pin mono coils, including options from Coiltek, Nugget Finder, and more. Select the best setup for your needs!

Convenient USB Power

Powered by a common USB power bank, the E1500 Plus offers flexibility and affordability with high-capacity options for extended runtime—no need for specialised batteries. A lightweight 10,000mAh 5V power bank provides approximately 10-12 hours of runtime.

Lightweight Design

Weighing under 850g without coil or battery, and under 2kg with a small coil and battery, the E1500 Plus is the lightest pulse induction gold detector available, built with a durable carbon fibre shaft.

Adjustable & Portable

Easily extend, collapse, or store the telescopic shaft, which adjusts for ergonomic use in tight spaces or on the go.

Free & Intuitive Software Upgrades

Ongoing R&D delivers continuous software upgrades that boost performance and unlock new features—constantly expanding your detector's capabilities at no extra cost.

Australian Support & Warranty

Backed by a 2-year warranty, with comprehensive support from AlgoForce and authorised dealers.

AlgoForce E1500 *plus*



AlgoForce E1500 *plus*

Carton Contents

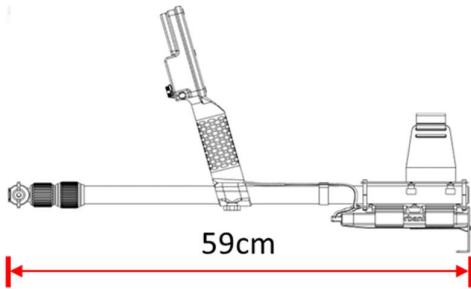
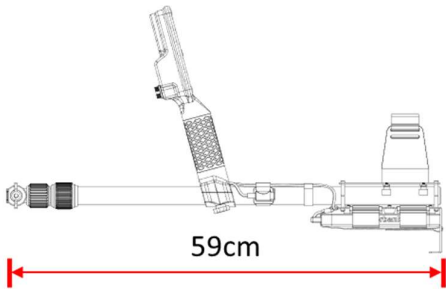
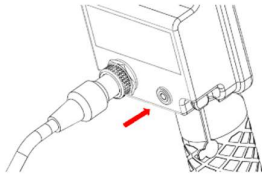
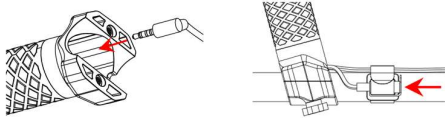
AlgoForce E1500 *plus* BASIC Package



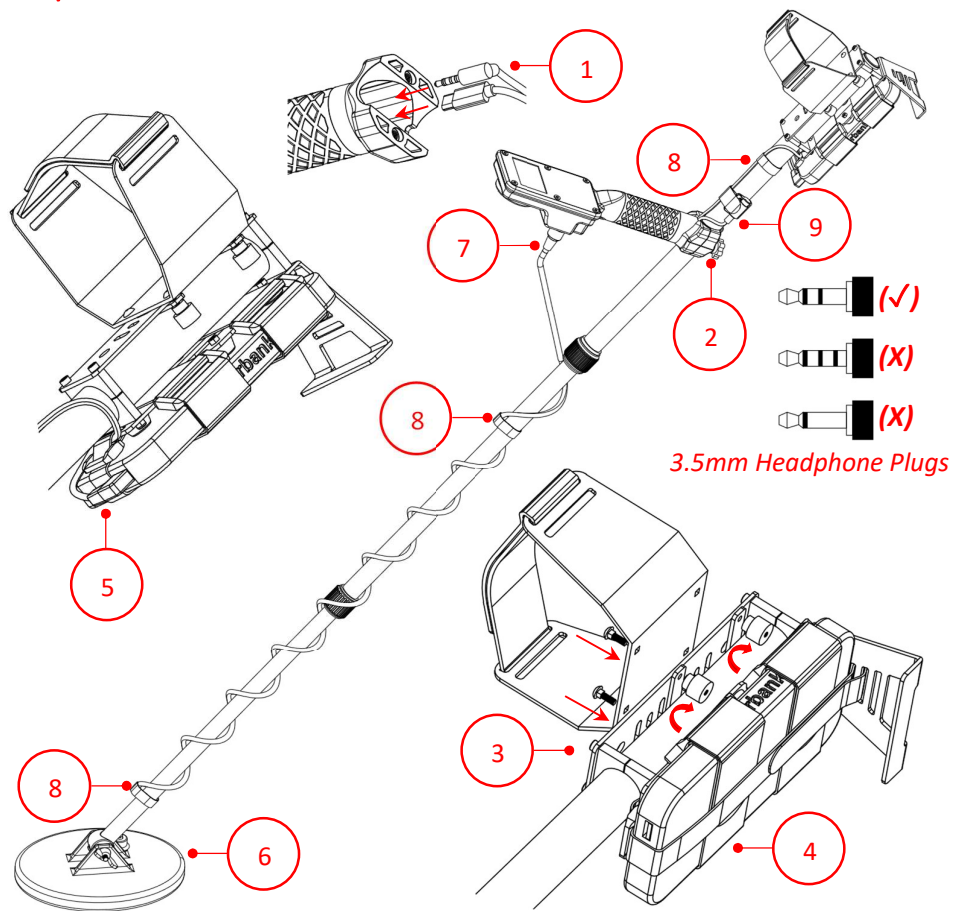
- * Images are for illustrative purposes only and do not represent actual size.
- * Cables, screws, straps, and armrest cover may vary by package.
- * The AlgoForce E1500 Plus Basic Package does not include a coil or power bank.

E1500 Evolution: E1500 vs E1500 Plus

The primary differences between the E1500 and E1500 Plus lie in speaker volume and headphone connector placement. The E1500 Plus offers a **significantly louder and crisper** speaker, making it ideal for environments that require higher sound output. Additionally, while the E1500's headphone connector is positioned at the rear of the control box, the E1500 Plus places it conveniently in the handle, with an extension cable secured along the upper shaft for **easier user access**.

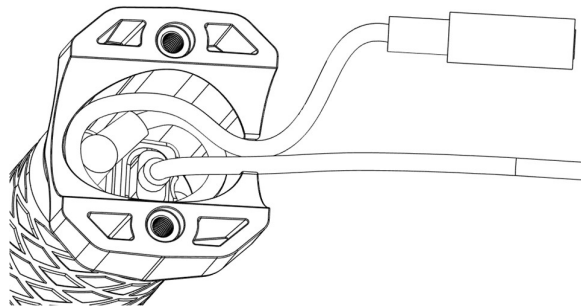
	E1500	E1500 Plus
		
Speaker Volume	We redesigned the audio circuit in the E1500 Plus, resulting in significantly louder and crisper speaker volume compared to the original E1500.	
Headphone Connector	 The headphone connector is situated at the rear of the control box.	 The headphone connector is positioned within the handle. An extension cable, included in the package, is connected to this internal headphone jack. The other end of the cable is secured to the upper shaft, providing easy access for headphone use.

Assembly



- ① Plug the USB cable and headphone extension cable into the control box.

Note: To keep the exposed length of the headphone extension cable short, you can store any excess cable inside the handle, as illustrated in the following picture.

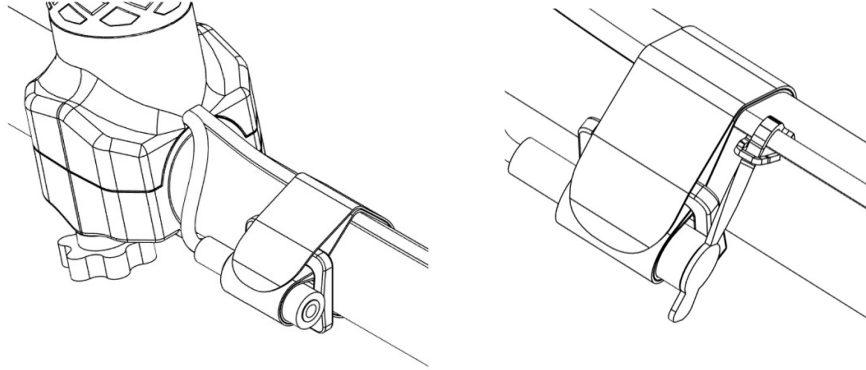


- ② Secure the control box to the shaft using two M5 screws.
- ③ Attach the armrest to the sliding rail.
- ④ Secure the power bank with the straps.
- ⑤ Connect the USB cable to the power bank.
- ⑥ Set the shaft to the appropriate length and attach the coil.
- ⑦ Plug the coil connector into the control box.
- ⑧ Use cable straps to tie the coil cable and USB cable to the shaft.

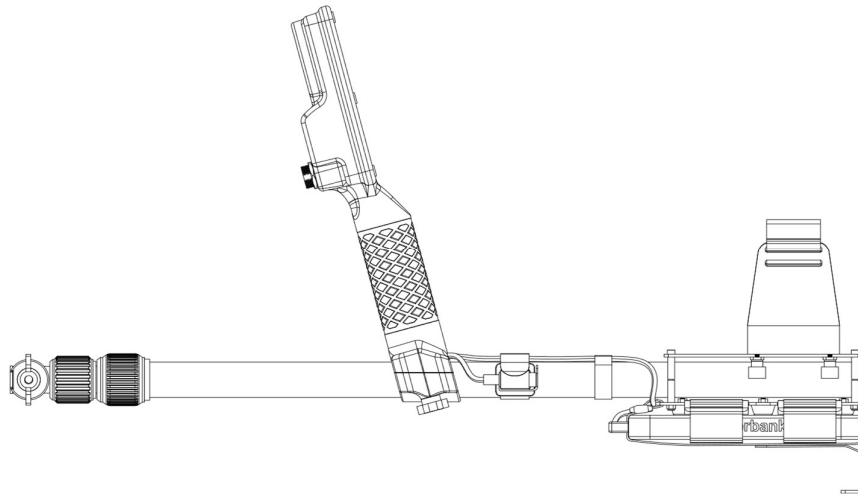
- ⑨ Use the Velcro strap with buckle to secure the headphone socket to the shaft.

Note:

- *The headphone socket is compatible only with a 3.5mm Tip-Ring-Sleeve (TRS) stereo headphone plug.*
- *The following images offer a close-up view of the fastening mechanism for the headphone socket. When the socket is not in use, a dust cap can be applied to keep it dust-free.*



- ⑩ For compact storage, release the two twist locks, collapse the shaft and remove the coil.



Button Functions

The keypad has 9 buttons with most having dual functions.



POWER ON/OFF

- HOLD for 3 SECONDS, then RELEASE to turn the detector ON or OFF.



MINUS and PLUS

- In MENU mode: PRESS to decrease or increase values.
- In MAIN DETECTION USER INTERFACE: PRESS to decrease or increase Sensitivity.



BACKLIGHT / THEME

- PRESS to adjust screen brightness.
- HOLD to toggle between Black and White screen themes.



SPEAKER / VIBRATION

- PRESS to adjust speaker volume.
- HOLD to adjust vibration intensity.



LEFT ARROW / PINPOINT

- In MENU mode: PRESS to move the cursor left.
- In MAIN DETECTION USER INTERFACE: PRESS to activate PINPOINT.



RIGHT ARROW / AUTO GROUND BALANCE

- In MENU mode: PRESS to move the cursor right.
- In MAIN DETECTION USER INTERFACE:
PRESS to cycle through three ground balance modes:
 - Fixed Ground Balance
 - Tracking Ground Balance Speed 1
 - Tracking Ground Balance Speed 2**HOLD** to activate Auto Ground Balance, then PUMP the coil up and down until you hear two beeps, and RELEASE.

Note: Ground Balance is ONLY available while in the HOT soil type.

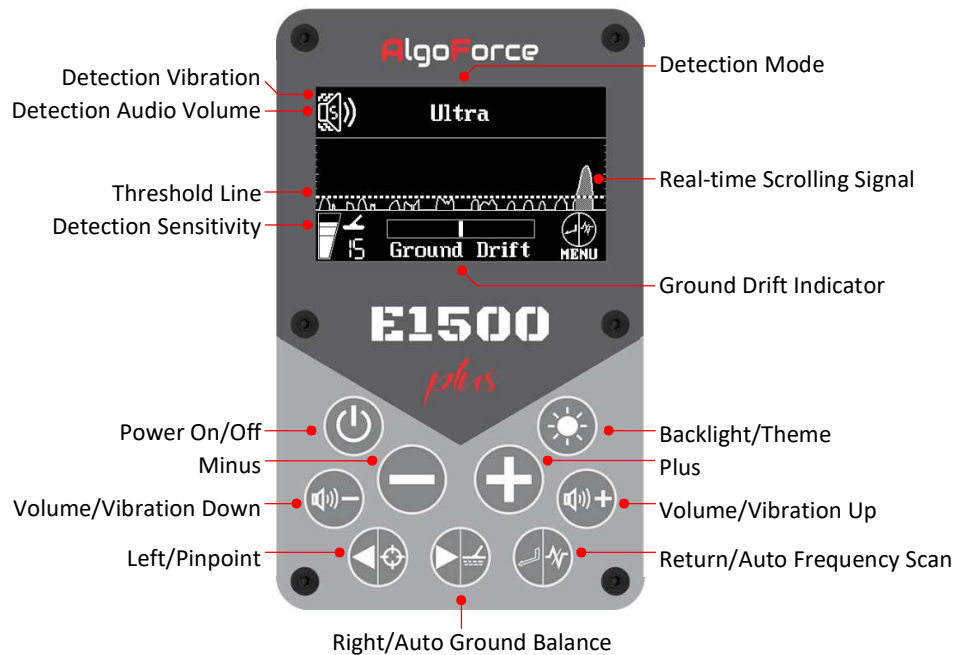


MENU / RETURN / AUTO FREQUENCY SCAN

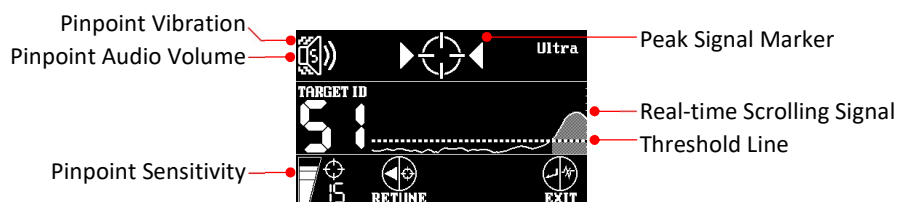
- PRESS to open the MENU (displayed on the lower third of the screen).
- HOLD to start Auto Frequency Scan.
- PRESS after using Pinpoint to return to the Main Detection User Interface.

User Interfaces

Standard User Mode



Main Detection User Interface in Standard User Mode



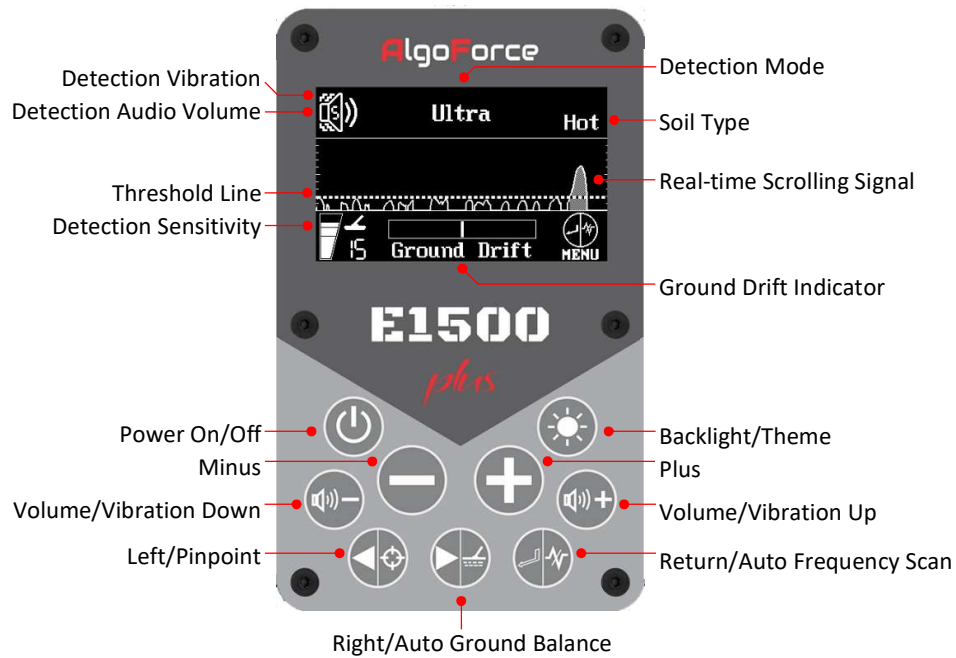
Pinpoint User Interface in Standard User Mode

Note: Settings made for Threshold, Sensitivity, Audio Tone and Mic Volume are Universal Settings. The values for each setting stay the same over all User Modes.

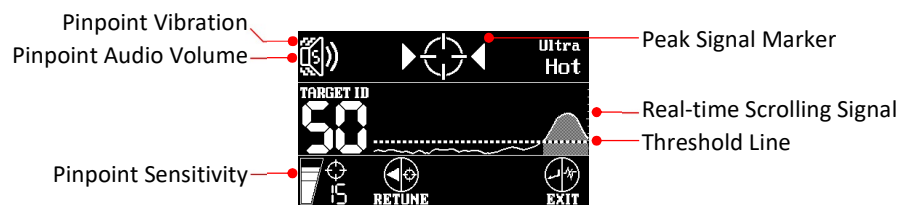
Special Note: If Threshold "Hum" is too High or Low for your hearing in Standard User Mode, after Quick Start has finished, select Intermediate or Advanced User mode to Adjust Threshold value.

AlgoForce E1500 *plus*

Intermediate User Mode



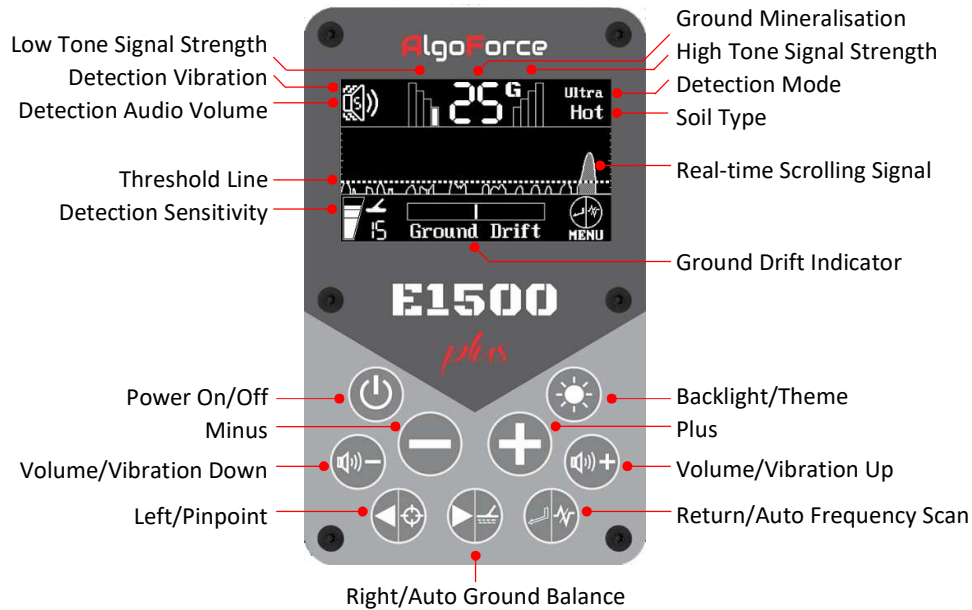
Main Detection User Interface in Intermediate User Mode



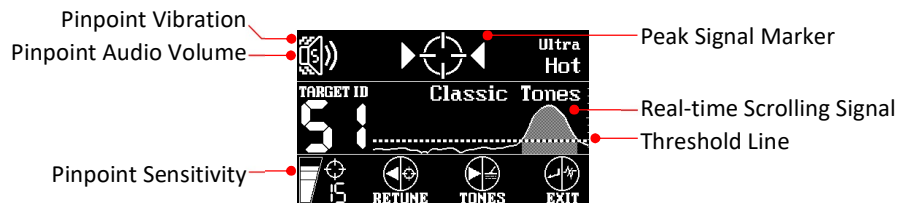
Pinpoint User Interface in Intermediate User Mode

AlgoForce E1500 *plus*

Advanced User Mode



Main Detection User Interface in Advanced User Mode



Pinpoint User Interface in Advanced User Mode

Special Note:

- While in Pinpoint Mode, you can adjust Sensitivity, Audio Volume, and Vibration, and these settings are stored independently from the settings used in the **Main Detection User Interface**. Changes can be made following the instructions on Button Functions page.
- The Conductivity Target ID (0-99) can assist in identification of targets. Refer to VI-2. Target ID on Page 18.
- Pinpoint is a Non-Motion Mode and the signal may “drift” over time. Pressing the Pinpoint button again retunes the detector. Refer to VI-2. Target ID on Page 18 for instructions.

Quick Start

I. Power On/Off



To turn on the detector, hold the Power On/Off button for 3 seconds, then release. Repeat to turn it off.

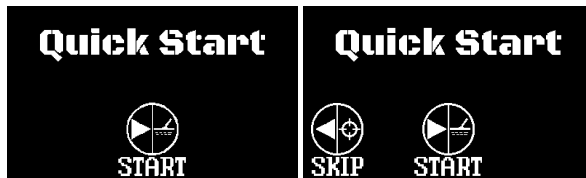
Tips:

- Some power banks may enter standby mode when no demand is detected, such as when a connected USB device is turned off. In this case, the power bank must be manually turned on before turning on the detector. To do this, press the power button of the power bank.
- Some power banks may turn on the detector as soon as it's plugged in—this is normal.

II. 7-Step Quick Start Guide (only available in Standard User Mode)

When powered on in Standard User Mode, the detector will launch this simple **7-step Quick Start Guide**. This will assist the new user to become familiar with the detector's user interface and menus.

Quick Start Frontpage



First-Time Power On

Subsequent Power On (after Coil Calibration)

Tips:

- SKIP* becomes available only after coil calibration. Use it only once you are familiar with all 7 Quick Start steps.
- The 7-step Quick Start Guide is available only in Standard User Mode. In Intermediate and Advanced User Modes, the detector powers on directly to the Main Detection User Interface.

Step 1: Coil Calibration.

Calibrate Coil	Calibrate Coil	Calibrate Coil
Fully extend shaft & lift coil 50cm above ground. Hold $\ominus + \oplus$ to start.	Keep the coil lifted 	Fully extend shaft & lift coil 50cm above ground. Hold $\ominus + \oplus$ to start.
 1/7	1/7	 1/7

Calibration Instruction

Calibration in progress

Skip option appears on re-entry

Tips:

- After coil calibration, a right triangle appears on re-entry. Pressing the Right/Auto Ground Balance button will skip this step.
- Coil calibration only needs to be done once and can be skipped until a different coil is connected.

- If you're unsure whether coil calibration has been performed for the currently connected coil, you can always recalibrate. Repeating the calibration will not cause any issues.

Step 2: Detection Mode Selection



💡 Tips:

- Ultra-Fine is the go-to choice for detecting gold nuggets of all sizes and is suitable for most situations. **If Ultra-Fine is greyed out after coil calibration, use Fine instead.**
- See Page 21 for details about the different Detection Modes and suggested coil sizes for each Mode.

Step 3: Auto Frequency Scan.

During Auto Frequency Scan, the detector measures electromagnetic interference at each frequency and displays the results as bars—the higher the bar, the greater the noise. Once Auto Frequency Scan completes, the screen will display **OK**, and the frequency with the lowest noise will be automatically selected.



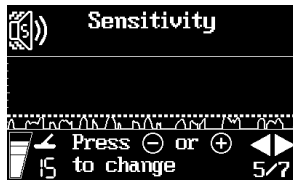
💡 **Tip:** You can activate Auto Frequency Scan anytime from the Main Detection User Interface by holding the **Return/Auto Frequency Scan** button.

Step 4: Volume & Vibration Adjustment.



💡 **Tip:** You can adjust the volume and vibration whenever the speaker icon appears at the top-left corner of the screen.

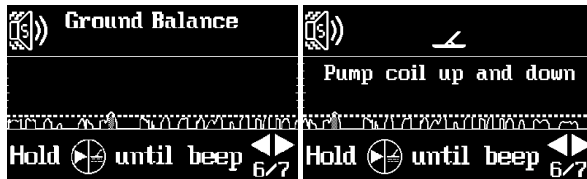
Step 5: Sensitivity Adjustment.



💡 Tips:

- When **Sensitivity** is set too low or too high, an up or down arrow will appear beside the value. This feature, only available in Quick Start when using the **Standard User Mode**, this is designed to guide new users toward the **optimal Sensitivity setting**.
- You can adjust the Sensitivity anytime from both the Main Detection User Interface and the Pinpoint User Interface.

Step 6: Auto Ground Balance. *In Standard User Mode, HOT Soil Type is the default setting. Refer to Page 17.*



When Auto Ground Balance is active, a coil icon appears at the top centre of the screen.

💡 Tips:

- Hold the **Right/Auto Ground Balance** button and pump the coil up and down until ground response is minimised or two short beeps sound, then release.
- You can activate Auto Ground Balance anytime from the Main Detection User Interface by holding the **Right/ Auto Ground Balance** button.

Step 7: Display Adjustment.



💡 **Tip:** You can adjust the Backlight brightness and invert the display theme anytime from both the Main Detection User Interface and the Pinpoint User Interface.

III. Menu Navigation and Controls



Enter/Exit Menu



Navigate Settings



Adjust Values

IV. Factory Reset

Navigate to **User Mode**, then hold both the **Minus** and **Plus** buttons for 3 seconds.

 **Tip:** Coil calibration data remains unchanged after factory reset.

V. Start Detecting

Keep the coil close to the ground and swing left and right at a pace of about 1 m/s.

V-1. Real-time Scrolling Signal

The **Real-Time Scrolling Signal**, together with the **Threshold Line**, helps users fine-tune **Sensitivity** settings. Adjust Sensitivity so the peaks of the Real-time Scrolling Detection Signal align with the Threshold Line when no target is present. When a target is detected, the signal exceeds the Threshold Line, and the area under the curve that surpasses the threshold is shaded in grey for easier visibility and interpretation.

V-2. Auto Ground Balance

The Soil Type Setting lets users select the most suitable soil profile for their detecting environment, optimising detector performance. The available options are **Hot**, **Mild**, and **Beach**. In **Standard User Mode**, the Soil Type setting is not available. The detector will always use the **Hot** Soil type (See “Soil Type Setting” on page 23 for details).

Auto Ground Balance is only required for the **Hot** soil type. Ground balancing is not needed—and cannot be performed—when using the **Mild** or **Beach** soil types.

Since the detector always uses the Hot Soil type in Standard User Mode, Auto Ground Balance is always available. In Intermediate and Advanced User Modes, the availability of Auto Ground Balance depends on whether the Hot Soil type is selected.

In **Advanced User Mode**, when Auto Ground Balance is activated, the ground balance values for both ground balance channels are also displayed in the top-right corner, as shown in the following picture.



V-3. Ground Drift Indicator

When the **Hot** soil type is used, the detector continuously monitors ground drift in the background and displays it as a horizontal bar in the Main Detection User Interface. If the **Ground Drift Indicator** bar expands beyond half of the full scale, it is recommended to perform Auto Ground Balance again. Note that target signals can affect the Ground Drift Indicator, so for accurate monitoring, ensure no targets are present during observation.

V-4. Ground Mineralisation *(only in Advanced User Mode)*

The **Ground Mineralisation** monitor provides a real-time numeric indication of the soil's mineralisation level. Displayed as a two-digit number (0–99) in the Main Detection User Interface, it helps users assess ground conditions at a glance. Higher values indicate more heavily mineralised soil. This feature is particularly useful for detecting changes in ground composition during a detecting session.

V-5. Low/High Tone Signal Strength *(only in Advanced User Mode)*

When sweeping over a **small target** (typically with a Target ID below 50), the detector produces a **high tone followed by a low tone**. For **larger targets** (usually with a Target ID above 50), the signal pattern is reversed—**low tone followed by high tone**. The Signal Strength Indicator displays this interaction with a series of bars: more bars indicate a stronger signal. By observing both the sequence and number of lit bars, experienced users can make an informed estimation of the target's **size and depth**.

VI. Pinpoint target *(if needed)*

Press the **Left/Pinpoint** button to enter the Pinpoint User Interface. In the Pinpoint User Interface, Sensitivity, Audio Volume, and Vibration settings are independent of those in the Main Detection User Interface and can be adjusted separately for optimal pinpointing.

VI-1. Peak Signal Marker

Pinpoint is a non-motion mode where the coil doesn't have to move to indicate a target. The detection signal gets stronger as the coil approaches the target, causing the audio (if audio output is on) or vibration (if vibration mode is on) to intensify. In Pinpoint mode, the detector tracks the target signal peak. When the target signal reaches 90% of this peak, the Peak Signal Marker on the top centre of the LCD screen will appear, helping users centre on targets more efficiently. If the coil is moved off the target and the signal volume decrease, the Peak Signal Marker disappears.

Pressing the **Left/Pinpoint** Button retunes the detection threshold due to ground variation or temperature drift. Pressing this button also resets the target signal peak to zero.

VI-2. Target ID

The Conductive Target ID (0-99) displayed in the Pinpoint User Interface remains stable even in highly mineralised soils. Generally, a higher number indicates a larger or more conductive target. To obtain an accurate target ID, it is recommended to follow these steps:

- Move the coil away from the target.
- Ensure the coil is resting on the ground surface and press the **Left/Pinpoint** button to retune.
- After that, slide the coil on the ground surface until the target is positioned just below the centre of the coil.

The conductivity target ID is also useful for assessing the target's shape. If the target ID fluctuates significantly when the coil is moved slightly off but still above the target, it likely indicates an irregularly shaped target, such as a bottle cap or a nail with a large head.

VI-3. Pinpoint Tones *(only in Advanced User Mode)*

There are 5 pinpoint tone settings within the pinpoint mode: Classic Tones, 5 Tones, 5 Tones Inverted, 100 Tones, and 100 Tones Inverted. Users can seamlessly switch between audio settings by holding the **Right/Auto GB** button while in pinpoint mode.

Classic Tones:

In Classic Tones audio setting, audio pitch correlates with signal strength, with higher pitches indicating stronger signals. Tailored for precise pinpointing of target locations.

5 Tones:

Audio pitch is determined by conductivity target ID, providing distinct audio feedback for different target ranges. Conductivity target ID ranges 0-19, 20-39, 40-59, 60-79, and 80-99 correspond to audio pitches of 330Hz, 490Hz, 650Hz, 810Hz, and 970Hz, respectively.

5 Tones Inv.:

Audio pitch varies by conductivity target ID in reverse order. Conductivity target ID ranges 0-19, 20-39, 40-59, 60-79, and 80-99 correspond to audio pitches of 970Hz, 810Hz, 650Hz, 490Hz, and 330Hz, respectively.

100 Tones:

Each conductivity target ID is associated with a unique audio pitch ranging from 250Hz to 1042Hz. **Higher** conductivity target IDs produce **higher** audio pitches, facilitating differentiation of targets.

100 Tones Inv.:

Each conductivity target ID is associated with a unique audio pitch ranging from 250Hz to 1042Hz. **Higher** conductivity target IDs produce **lower** audio pitches, facilitating differentiation of targets.

5 Tones Inv. and **100 Tones Inv.** are added to provide an alternative audio feedback option, leveraging the fact that human ears are more sensitive to high-pitched sounds. When users are searching for highly conductive targets with higher target IDs, **5 Tones** and **100 Tones** can be used to emphasise these signals. However, when targeting small items, such as small gold nuggets with lower target IDs, **5 Tones Inv.** and **100 Tones Inv.** can be utilised to highlight these signals with higher-pitched tones, improving detection and identification.

In Classic Tones audio setting, users retain the ability to adjust the audio threshold through the Threshold setting. In both 5 Tones audio setting and 100 Tones audio setting, the audio threshold is fixed at zero. This ensures ease of differentiation between conductivity target IDs solely based on unique audio pitches, eliminating potential confusion with the audio threshold.

Ground Balancing Methods in Metal Detectors

There are three common ground balancing methods for metal detectors, each with unique advantages and limitations:

Manual Ground Balance:

This method allows the user to adjust the detector's settings manually to compensate for ground mineralisation. While manual ground balance offers maximum sensitivity to small and deep targets, it requires skill and attention, as the user must listen to feedback and make precise adjustments. Once set, the ground balance remains fixed until the user changes it, making it unsuitable for highly variable ground conditions unless regularly recalibrated.

Auto Ground Balance:

Auto ground balance simplifies operation by automatically calculating and setting the optimal ground balance based on current soil conditions. **Users initiate** this process with simple action, such as **pressing a button while "pumping" coil up & down**, making it quick and convenient. Though it does not adapt to changing ground conditions like tracking ground balance, it provides a reliable and efficient setup for most detecting environments without the complexity of manual adjustments.

Tracking Ground Balance:

Tracking Ground Balance continuously adjusts as the detector moves across the terrain. It is useful when ground conditions change frequently over short distances or when repeated Auto Ground Balance is required. However, continuous adjustment may filter out faint signals from small or deep targets.

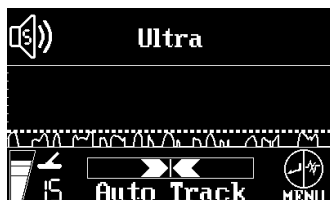
How to Activate Tracking Ground Balance

Briefly press the **Right/Auto Ground Balance** button to cycle through three ground balance modes:

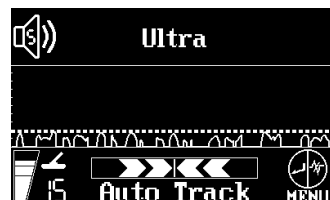
- Fixed Ground Balance
- Tracking Ground Balance Speed 1
- Tracking Ground Balance Speed 2



Fixed Ground Balance



Tracking GB Speed 1



Tracking GB Speed 2

When either tracking mode is activated from Fixed Ground Balance, the detector tracks rapidly for the first five seconds to adapt quickly to the ground. It then switches to the selected tracking speed for smoother, more stable operation.

In any mode, perform Auto Ground Balance by holding the **Right/Auto Ground Balance** button while pumping the coil up and down. When the button is released, the ground balance remains fixed in Fixed mode or continuously adjusts as the detector moves across the terrain in either Tracking mode. Speed 2 tracks ground changes faster than Speed 1.

Tracking Ground Balance has been field-tested and shown to provide a much smoother detecting experience over variable ground, particularly in highly mineralised soil.

Recommended Ground Balance Settings

- Continue using **Fixed Ground Balance** when the ground is relatively consistent.
- Select **Tracking Speed 1** if Auto Ground Balance needs to be performed frequently because the ground changes over short distances.
- **Tracking Speed 1** is recommended for most variable ground because it provides effective ground tracking while reducing the risk of tracking out small targets.
- Select **Tracking Speed 2** only when Speed 1 cannot keep up with rapid ground changes.
- For best results, perform Auto Ground Balance over clean, target-free ground at the start of each detecting session, after changing the ground balance mode, or whenever noticeable ground noise occurs.

User Settings

Settings in Standard User Mode

Note: In Standard User Mode, the Soil Type setting is not available. The detector will always use the Hot Soil Type. Therefore, ground balance adjustment is mandatory to achieve stable operation.

1. Sensitivity

Adjust Sensitivity so the peaks of the Real-time Scrolling Detection Signal align with the Threshold Line when no target is present.



Detection Sensitivity



Pinpoint Sensitivity

2. User Mode

The User Mode setting offers **Standard**, **Intermediate**, and **Advanced** modes to accommodate both beginners and experienced users, providing a balance of simplicity and flexibility. Users can easily switch user modes to suit their detecting style and skill level. To perform a factory reset, simply press and hold both the **Minus** and **Plus** buttons for 3 seconds.



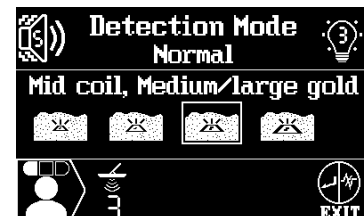
3. Detection Mode

The device offers four distinct detection modes: **Ultra-Fine**, **Fine**, **Normal**, and **Large**.

Ultra-Fine: This is the go-to choice for detecting gold nuggets of all sizes and is suitable for most situations. When used with the Nugget Finder AUZZY 5" Mono, the Coiltek 10"x5" Elite Max, the Nugget Finder 8"x6" Sadie, or similar-sized coils, it excels, even in highly mineralised soils. This combination is strongly recommended for locating small gold nuggets in various ground conditions.

Fine: Fine detection mode reduces sensitivity to mineralised soil and may not detect very small gold nuggets. When paired with the Coiltek 9" Elite Max or similar-sized coils, this mode performs exceptionally well, even in highly mineralised soils.

Normal: This mode decreases sensitivity to highly mineralised soil and may not detect small gold nuggets. When used with the Coiltek 14"x9" Elite Max, the Nugget Finder 13"x9" Mono, or similar-sized coils, it delivers outstanding performance, even in highly mineralised soils. It is highly recommended for locating medium to large gold nuggets in various ground conditions.

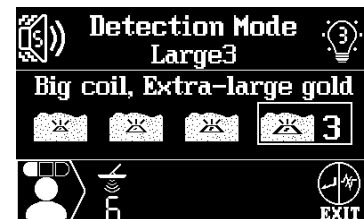
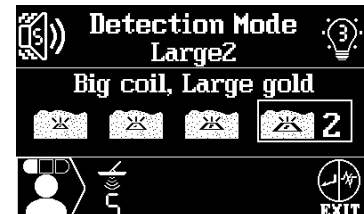
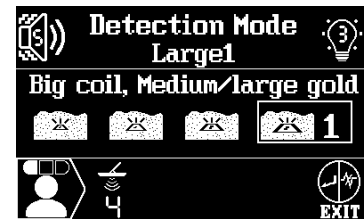


Large: Reserve Large Gold mode for use in extremely mineralised soil with high levels of wet salt. When used with the Coiltek 14"x9" Elite Max, the Nugget Finder 13"x9" Mono, or larger coils, this mode excels, even in highly mineralised soils. This combination is highly recommended for locating large gold nuggets in different ground conditions. There are three Pulse Delay Options for Large Detection Mode, allowing users to optimise detection for various object sizes and reduce mineralisation noise.

The Pulse Delay Options allow users to select the time delay between the transmitted pulse and the reception of the return signal. After the primary pulse is transmitted, the detector waits for a short period before it starts to listen for the secondary pulse generated by the metal object. This waiting period is known as the pulse delay.

Shorter Delay: Detects weaker signals from smaller objects.

Longer Delay: Filters out signals from small, less conductive objects, focusing on larger items. Reduces mineralisation noise in high mineralisation areas for more stable and accurate detection.



Large (Pulse Delay 1): Offers balanced performance for objects of all sizes. Audio response is fast and sharp.

Large (Pulse Delay 2): Filters out signals from very small objects, focusing on larger items. Audio response is rounded and elongated.

Large (Pulse Delay 3): Filters out signals from small objects, focusing on larger items. Audio response is rounded and elongated.

Tip: Large (Pulse Delay 2) and Large (Pulse Delay 3) can be used to ignore small lead pellets for nugget detecting or small foils for beach detecting.

The four detection modes are not exclusively designed for gold nuggets—they can also be used to find jewellery, coins, and other treasures. With a small coil like the Nugget Finder AUZZY 5" Mono, the Coiltek 10"x5" Elite Max, the Nugget Finder 8"x6" Sadie or the Coiltek 9" Elite, use the Ultra-Fine or Fine detection mode for locating fine treasures. For a larger coil, such as the Coiltek 14"x9" Elite Max or the Nugget Finder 13"x9" Mono, utilise the Normal or Large Gold mode for deeper discoveries.

Settings in Intermediate User Mode

4. Audio Threshold

Audio Threshold adjusts the volume of the constant background hum added to the detection audio. It's recommended to set it to a level that's just barely audible.



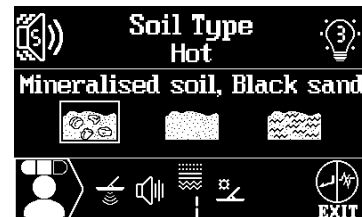
5. Soil Type

The Soil Type Setting lets users select the most suitable soil profile for their detecting environment, optimising detector performance. The available options are **Hot**, **Mild**, and **Beach**.

Note. *Auto Ground Balance* is only available in **Hot Soil Type**

Hot

Recommended for goldfields, this setting is ideal for mineralised soils and black sands. ***It enables continuous ground drift monitoring and requires ground balancing for peak performance.***



Mild

Designed for extremely low-mineralised environments, such as mild goldfields, parks, open fields, and dry sand. This setting leverages AlgoForce's **ZeroGB technology**, disabling ground balance to maximise sensitivity to nuggets, coins, and treasures of all sizes.



Ground balancing is not required when using the Mild setting.

If you're currently using the Hot setting and the Ground Mineralisation monitor reads **00 or 01** while pumping the coil, you may switch to the Mild setting. However, if switching results in a **sensitivity drop of 4 or more** compared to the Hot setting with proper ground balance, the Mild option is not suitable—revert to Hot.

Beach

Also powered by AlgoForce's **ZeroGB technology**, the Beach setting aggressively rejects seawater signals, ensuring stable performance on wet sand and even with the coil submerged. It offers high sensitivity to coins and beach treasures without requiring ground balance.



6. Calibrate Coil

When installing a new coil, follow the on-screen instructions under **Calibrate Coil**, as shown in **Figure 6-1**. During the calibration process, keep the coil lifted. A progress bar will appear to

indicate the calibration process, as illustrated in **Figure 6-2**. Once calibration is complete, the detector will automatically enter Detection Mode.

Any detection modes that fail calibration will be greyed out and **unavailable** in Intermediate User Mode. **Figure 6-3** shows an example where **Ultra-Fine** mode has failed calibration.



Figure 6-1

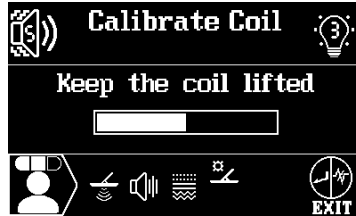


Figure 6-2

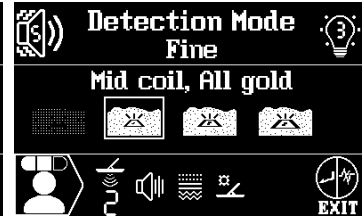


Figure 6-3

Settings 7 to 12 are only available in Advanced User Mode.

Note: Settings 1 to 6 shown on the previous pages are also available in Advanced User Mode.

7. Coil Selection

The **Coil Selection** setting allows the detector to store calibration data and coil size information for up to **five different coils**, each represented by a coil icon. This makes it easy to switch between coils without recalibrating every time. A factory reset does **not** erase these saved coil settings.

Each coil icon stores:

- Calibration data
- Coil size (user-defined for easy identification)

Under **Coil Selection**, the subtitle shows "**Coil Uncalibrated**" if the selected coil icon has never been calibrated. Otherwise, it displays the current detection mode along with the coil's status—either "**Coil Ready**" or "**Coil Not Optimal**" for that mode. The images on the right illustrate both status examples.

💡 Tips:

- When the coil is close to mineralised ground or large metal objects, its electrical characteristics can temporarily change. This may cause the detector to report the coil as suboptimal, even if it is functioning normally.
- To ensure accurate coil status detection, fully extend the shaft and lift the coil **at least 50 cm** above the ground.



When the subtitle displays "**Coil Uncalibrated**" or "**Coil Not Optimal**," follow the on-screen prompt to calibrate the coil:

1. Fully extend the shaft and hold the coil in the air, ensuring it is at least 50 cm away from any metal or ground.
2. Press and hold both the **Minus** and **Plus** buttons until calibration begins.
3. Keep the coil lifted throughout the 30-second calibration process. The system will automatically calibrate the coil for all detection modes. Once complete, the detector will switch to Detection Mode. Any modes that fail calibration will be greyed out. In Advanced User Mode, all Detection Modes remain selectable, including those greyed out.

If you connect a different coil and select a coil icon that was previously calibrated to another coil, the subtitle may still show "**Coil Ready**" if the two coils have similar electrical properties. However, to ensure optimal performance, it is recommended to recalibrate. This will update the selected coil icon with calibration data for the newly connected coil.

Editing Coil Size

To rename or edit the coil size label:

1. While in Coil Selection Mode, press and hold the **Return/Auto FS** button.
2. A short underscore will appear beneath the editable number.
3. Use the **Left/Pinpoint** or **Right/Auto GB** buttons to navigate between digits.
4. Adjust each digit using the **Minus** or **Plus** button.
5. Press **Return/Auto FS** again to exit editing mode.

💡 Tips:

- The coil size label is purely for identification—it does **not** affect calibration or detection performance. However, it's recommended to set it to reflect the actual physical coil size for easier identification in future use.
- Coils larger than the 14"x9" with electrical parameters within spec will work with the E1500 Plus control box. However, the shaft may become wobbly with extra-large, heavy coils. Over-tightening the spin locks could also cause damage.

8. Audio Tone

The Audio Tone setting adjusts the frequency of the constant background hum added to the detection audio. The tone can be set according to personal preference.



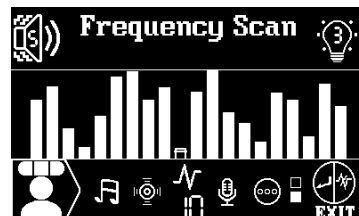
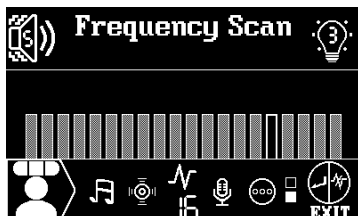
9. Audio Treble

Users can adjust the treble to enhance or reduce the prominence of higher-pitched sounds, affecting the overall tonal balance of the audio. Increasing the treble results in a brighter, crisper sound. Decreasing the treble produces a softer, mellower sound. This feature provides the flexibility to tailor audio feedback to match individual detecting styles, whether you prefer crisper or softer audio responses.



10. Frequency Scan

The real-time noise level of the selected frequency and the past noise levels from the last Auto FS are displayed in a graph for convenient manual frequency selection. If Auto FS hasn't been run since a factory reset, the past noise levels are displayed as gray bars of equal height. To choose a relatively quiet frequency with a low noise level, press **Minus** or **Plus**.



💡 **Tip:** Electromagnetic interference can vary over time. The historical noise levels from the last Auto FS may not accurately reflect current conditions.

To run **Auto FS**, hold the **Return/Auto FS** button either from the Main Detection User Interface or within the Frequency Scan setting interface.

During Auto FS, the detector measures electromagnetic interference at each frequency and displays the results as bars—the higher the bar, the greater the noise. Once Auto FS completes, the screen will display **OK**, and the frequency with the lowest noise will be automatically selected.

To cancel the process before completion, briefly press the **Return/Auto FS** button; the screen will then display **CANCELLED**.



11. Mic Volume

The control box has a microphone that captures ambient sounds, which can then be immediately played back through the headphone. This feature allows the user to simultaneously hear both the ambient sounds and detection audio. The Mic Volume setting allows the user to adjust the volume of the ambient sound playback. To use this feature, a headphone must be connected.



12. Device Info

Information about the power supply voltage, software version, and hardware serial number can be found in Device Info.



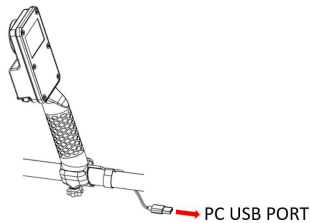
Software Upgrade Instruction

The AlgoForce E1500 and AlgoForce E1500 Plus share the same software binary file. However, it is not recommended to use software versions earlier than V1.1.2 on the AlgoForce E1500 Plus.

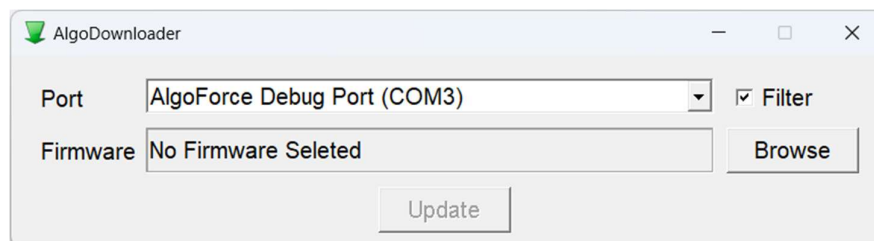
Both models follow the same software upgrade procedure, which currently can only be performed on a Windows operating system. Windows 10 or 11 are preferred.

To upgrade the software for free, follow these steps:

- First-time upgrades: download the AlgoDownloader from <https://algoforce.com.au/pages/downloads>.
- Download the latest software binary file from <https://algoforce.com.au/pages/downloads>.
- Turn off the control box. Connect it to your PC with a USB cable.
- Turn on the control box and it will automatically enter upgrade mode.



- Open AlgoDownloader and choose the appropriate port from the dropdown list. The 'Filter' option is selected by default, displaying only AlgoForce ports in the list. (Note: For Windows 7 and Windows 8, if the USB device driver is not already installed on your PC, the AlgoForce port will not be displayed. In this case, download the USB device driver from <https://algoforce.com.au/pages/downloads> and follow the instructions in the README.TXT file included in the zip file to install it.) Click 'Browse' to select the downloaded software binary file, and then click 'Update' to initiate the upgrade process (which takes approximately 10 seconds).



Note: The port number may vary on different PCs. Incorrect port selection will result in an upgrade error.

- Once the upgrade is complete, a window will pop up displaying 'Upgrade Successful.' After that, disconnect the control box from the PC.
- Connect the power bank to the control box and turn it on. **It is crucial to perform a factory reset to fully complete the software upgrade process. Afterward, be sure to recalibrate the coil as you would with a new detector.**

Bug Report and Feature Request

AlgoForce highly values customer feedback as a crucial means of enhancing our products. To ensure a seamless feedback process, we encourage you to reach out to us directly via email at admin@algoforce.com.au. If you come across any bugs or have ideas for new features that could enhance your metal detecting experience, please send us an email with a detailed description of the issue or requested feature. Kindly include the hardware serial number and software version of your detector (located in the Device Info setting) in your email. Our dedicated team of developers will promptly review your feedback and respond to you accordingly. We appreciate your contribution and look forward to working together to improve our products.

Safety and Care

To ensure safe use and longevity of your AlgoForce E1500 Plus, please follow these guidelines:

- Do not immerse the control box in water; it is not water-resistant.
- Clean the detector with a damp cloth, not solvents.
- Avoid extreme temperatures and keep it out of vehicles in extreme weather.
- The detector has small parts that could be a choking hazard, keep it away from children.
- Avoid contacting the detector with sharp objects to prevent scratches or damage.
- Handle the detector with care during transportation or storage to prevent violent vibrations or drops.
- Stay aware of your surroundings, especially when wearing headphones.
- The detector has an ambient sound awareness feature for headphone use, but it does not guarantee that all sounds will be heard.
- Before using in public areas, check local laws and regulations.
- Avoid disconnecting or connecting the coil to the control box after the unit has been powered up, as doing so could potentially damage the control box.
- The AlgoForce E1500 Plus is specifically designed to operate with mono coils, utilizing the mono winding for both transmission and reception. While it's technically possible to plug in a DD coil, only the transmit winding would function as a mono coil, as the receive winding would remain open circuit. DD coils are not recommended for use with the AlgoForce E1500 Plus.
- When using coils heavier than the NF 14"x9" Evo, the shaft may experience slight wobbling despite tightening the spin locks.
- When the telescopic shaft is fully or nearly fully extended, it may experience wobbling. It is recommended to keep the maximum extension length of both the lower and middle shafts at least 5cm shorter than their full extension length.
- Over-tightening the spin locks could cause damage to them.

EMC Compliance

AlgoForce E1500 Plus has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

AlgoForce E1500 Plus complies with the radiated emission limits for AS CISPR11:2017(Group 1, Class A). Class A equipment is equipment suitable for use in all locations other than those allocated in residential environments and those directly connected to a low voltage power supply network which supplies buildings used for domestic purposes.

Caution: AlgoForce E1500 Plus is not intended for use in residential environments and may not provide adequate protection to radio reception in such environments.

Returns Policy

If you purchase the AlgoForce E1500 Plus from a dealer, please reach out to them directly for any returns. Return policies may vary by dealer, so it's recommended to confirm these details with your dealer prior to purchase.

If you purchase AlgoForce E1500 Plus from AlgoForce's Amazon store, please contact Amazon for any returns.

If you purchase AlgoForce E1500 Plus from AlgoForce's website (<https://algoforce.com.au>) or directly from AlgoForce Pty Ltd, please refer to the following paragraphs on this page regarding the returns policy.

Change of mind returns:

Subject to your rights under the Australian Consumer Law, if you wish to return an item because you have changed your mind about your purchase, AlgoForce Pty Ltd will offer you refund provided that:

- You return the item/s within 30 days of purchase and produce your original receipt.
- The item is in re-saleable condition, meaning that:
 - It is in its original packaging, including instruction manuals and all accessories; and
 - It is unworn, unused, unassembled, and in its original condition.
- You are responsible for the transportation costs to AlgoForce Pty Ltd.

If these requirements are not satisfied, AlgoForce Pty Ltd reserves the right not to offer refund for change of mind returns.

Other Returns:

In addition to any other rights you may have under the Australian Consumer Law, AlgoForce Pty Ltd will accept product returns and provide you with the choice of an exchange (where feasible) or a refund where:

- The product is faulty or is not of acceptable quality; or
- The product is not fit for its intended purpose; or
- The product does not match the sample or our description.

For all returns, you must return the item/s within 30 days of purchase and produce your original receipt. When returning a product, you will be asked for information that is relevant to your return, or to satisfy legislative requirements. If you do not provide this information, then we may be unable to process your return. AlgoForce Pty Ltd reserves the right to assess the condition and age of returned goods prior to providing an exchange or refund. This may result in an exchange or refund being refused. Refunds will be processed using the payment method stated on your original receipt. AlgoForce Pty Ltd reserves the right not to offer an exchange or refund where the item fault is a result of misuse or neglect.

If you need to return an item, please contact us at admin@algoforce.com.au with your order number and details about the product you would like to return. We will respond quickly with instructions on how to return items from your order.

Warranty Information

The AlgoForce E1500 Plus control box, shaft, and armrest are covered by a 2-year warranty for manufacturing defects, beginning from the original purchase date. A valid purchase receipt or tax invoice is required for warranty claims. For secondhand purchases, ensure you obtain the original purchase receipt to transfer any remaining warranty.

This warranty excludes damage caused by:

- Over-voltage or reverse voltage supply
- Misuse, abuse, modification, or alteration
- Water exposure, accidents, or neglect

Tampering with the control box voids the warranty. Any included coil is covered by the coil manufacturer's warranty, not by AlgoForce Pty Ltd.

The warranty assistance procedure depends on the purchase source. If the unit was bought from an authorised dealer, warranty support will follow a different process than for purchases made from AlgoForce Pty Ltd. Purchases made from AlgoForce Pty Ltd include those made through AlgoForce's Amazon store, the official website (<https://algoforce.com.au>), or directly from AlgoForce Pty Ltd.

For Units Purchased from a Dealer:

If you purchased an AlgoForce E1500 Plus from a dealer or own a secondhand unit originally purchased from a dealer, please follow these steps for warranty assistance:

1. Contact Your Dealer

Customers should contact your dealer directly with details of the issue and a scanned copy of the original customer receipt. The dealer assesses the problem based on the customer's description, photos, or videos and confirms if it qualifies for warranty support. If required, the dealer may request the unit be sent to them to verify the warranty status.

2. Send the item for service

2-1. If the dealer determines the issue qualifies for warranty coverage:

For customers in Australia, the unit should be sent by either the customer or the Dealer (if in possession of the unit) to AlgoForce Pty Ltd at: AlgoForce Pty Ltd, PO BOX 393, GLENSIDE SA AUSTRALIA 5065.

For customers outside Australia, the unit should be sent directly to the dealer. The customer should follow up with the dealer for diagnosis, repair, and return.

2-2. If the issue does not qualify for warranty coverage:

If the problem does not qualify for warranty coverage, the unit should be sent to AlgoForce Pty Ltd at: AlgoForce Pty Ltd, PO BOX 393, GLENSIDE SA AUSTRALIA 5065.

3. Diagnosis and Quotation

If the unit is sent to AlgoForce Pty Ltd, we will diagnose the issue upon receipt and email the customer a quote, including return postage costs. If the item is not under warranty, repair

fees may apply. Repairs will proceed, and the item will be returned after payment of any applicable charges.

Note: If the dealer fails to send an issue confirmation email to AlgoForce Pty Ltd or if the email lacks necessary details to verify the warranty status, AlgoForce Pty Ltd reserves the right to apply repair fees, even if the item is within the warranty period.

For Units Purchased from AlgoForce:

If you purchased an AlgoForce E1500 Plus from AlgoForce, or own a secondhand unit originally purchased from AlgoForce, please follow these steps for warranty assistance:

1. Email Warranty Request

Send an email to admin@algoforce.com.au with the following required information and a scanned copy of the original purchase receipt. You will receive a response with a Repair or Warranty Service Number (RWSN).

First Name: _____ Last Name: _____

Serial Number: _____

Detailed Description of the Problem: _____

Return Shipping Address: _____

Billing Address (if not the same as the return shipping address): _____

Return Shipping Preference:

☐ AusPost Standard ☐ AusPost Express

2. Send the Item for Service

Once you have received the RWSN, please send the item along with a brief note that includes the RWSN to:

AlgoForce Pty Ltd, PO BOX 393, GLENSIDE SA AUSTRALIA 5065

3. Diagnosis and Quotation

After receiving your item, AlgoForce Pty Ltd will diagnose the issue upon receipt and email you a quote, including return postage costs. If the item is not under warranty, repair fees may apply. Repairs will proceed, and the item will be returned after payment of any applicable charges.

Additional Notes:

- The owner is responsible for shipping costs to and from AlgoForce Pty Ltd.

AlgoForce E1500 *plus*

- Repairs come with a 90-day warranty.
- Please be aware that user-stored data in the detector may be lost during repairs.
- Items presented for repair may be replaced with refurbished goods or parts of the same type as necessary.

Specifications

Ultra-Fine PI Technology	✓
Conductive Target ID	0-99
Fundamental Transmit Frequency	1500 Hz (adjustable)
Coil	Compatible with GPX 4500/5000 aftermarket mono coils
User Coil Calibration	✓
LCD	B/W 2.7" 400x240 pixels
Backlight Adjust	✓
Mic for Ambient Sound Awareness	✓
Handle Vibration	✓
Loudspeaker	✓
3.5mm Headphone Socket	✓
Ground Balance	Automatic, dual ground balanced channels
Sensitivity Control	✓ (Visual detection threshold for easy sensitivity control)
Audio Threshold Control	✓
Audio Tone Control	✓
Frequency Scan	Automatic and Manual (Visual representation of noise levels across all frequencies in one graph for easy manual frequency selection)
Volume Control	✓
Shaft Length (Adjustable)	Fully extended: 150cm Collapses to 59cm
Weight	<850g without coil or power bank
Power Source	External 5V USB power bank with minimum 3A output
Average Current Consumption	800mA
Warranty	2 years, Limited Part/Labor

Release Note for Software V4.0.0

Release Date: 10/09/2026

Overview

Version 4.0.0 introduces Tracking Ground Balance and refined signal filtering, building on the usability improvements introduced in Version 3.0.0.

Key highlights include:

- New **Tracking Ground Balance** for smoother operation over variable ground when using the HOT soil type.
- Two tracking speeds to suit different rates of ground variation.
- Refined filtering for quieter operation and slightly improved sensitivity.

What's New in V4.0.0

1. Tracking Ground Balance when using the HOT soil type

In Version 3.0.0, Auto Ground Balance is performed by holding the **Right/Auto Ground Balance** button while pumping the coil up and down. Once the button is released, the ground balance remains fixed until Auto Ground Balance is performed again.

Based on user feedback, Auto Ground Balance may need to be performed frequently when detecting over rapidly changing ground. To improve operation in these conditions, Version 4.0.0 introduces **Tracking Ground Balance**.

Briefly press the **Right/Auto Ground Balance** button to cycle through three ground balance modes:

- Fixed Ground Balance
- Tracking Ground Balance Speed 1
- Tracking Ground Balance Speed 2

In any mode, perform Auto Ground Balance by holding the **Right/Auto Ground Balance** button while pumping the coil up and down. When the button is released, the ground balance remains fixed in Fixed mode or continuously adjusts as the detector moves across the terrain in either Tracking mode. Speed 2 tracks ground changes faster than Speed 1.

Tracking Ground Balance has been field-tested and shown to provide a much smoother detecting experience over variable ground, particularly in highly mineralised soil.

Recommended Ground Balance Settings

- Continue using **Fixed Ground Balance** when the ground is relatively consistent.
- Select **Tracking Speed 1** if Auto Ground Balance needs to be performed frequently because the ground changes over short distances.
- **Tracking Speed 1** is recommended for most variable ground because it provides effective ground tracking while reducing the risk of tracking out small targets.
- Select **Tracking Speed 2** only when Speed 1 cannot keep up with rapid ground changes.

- For best results, perform Auto Ground Balance over clean, target-free ground at the start of each detecting session, after changing the ground balance mode, or whenever noticeable ground noise occurs.

2. Refined Filtering

The detector's filtering has also been refined in Version 4.0.0.

You may notice:

- Quieter and more stable operation.
- Slightly improved sensitivity.

Compatibility and Installation

- Compatible with all existing **E1500** and **E1500 Plus** units.
- Please follow the standard firmware update process outlined in the user manual.
- The AlgoDownloader firmware upgrade tool is currently available only for Windows PCs.

Release Note for Software V3.0.0

Release Date: 11/10/2025

Overview

Version 3.0.0 introduces major usability enhancements for both beginner and advanced users, building on the foundation set in Version 2.0.0.

Key highlights include:

- A new **Standard Mode** designed for beginners.
- A **Quick Start Guide** in Standard Mode to simplify setup.
- **Restored full flexibility in Advanced Mode**, giving expert users more control while maintaining informative coil compatibility feedback.

What's New in V3.0.0

1. Three User Modes

- The previous *Standard Mode* has been renamed to **Intermediate Mode**.
- A new **Standard Mode** has been added, tailored specifically for beginners who want maximum simplicity.
- **Advanced Mode** remains available for expert users who prefer full control.

2. Quick Start Guide in Standard Mode

When powered on in Standard Mode, the detector now launches a simple **7-step Quick Start Guide** to help new users get detecting quickly and confidently.

The guide walks through:

- Coil Calibration
- Detection Mode Selection
- Frequency Scan
- Volume & Vibration Adjustment
- Sensitivity Adjustment
- Ground Balance
- Display Adjustment

This guided workflow ensures new users start with optimal settings right from the beginning.

3. Restored Flexibility in Advanced Mode

Based on community feedback, Advanced Mode now gives full access to all detection modes:

- Modes for which the coil is not ideally calibrated will still appear **greyed out** to indicate they are not optimal.
- Greyed-out modes are now **selectable**.
- The **real-time coil status** for the currently selected mode can be viewed in the Coil Selection menu, with three possible states:
 - *Uncalibrated*

- *Ready*
- *Not Optimal*

Coil Status Accuracy – Important Tip

When the coil is close to mineralised ground or large metal objects, its electrical characteristics can temporarily change. This may cause the detector to report the coil as suboptimal, even if it is functioning normally.

To avoid false coil status readings, follow the usage tip from the user manual:

 **Tip:** *For accurate coil status detection, fully extend the shaft and lift the coil at least 50 cm above the ground before checking status.*

Compatibility and Installation

- Compatible with all existing **E1500** and **E1500 Plus** units.
- Please follow the standard firmware update process as outlined in the user manual.
- Currently, the **AlgoDownloader** (firmware upgrade tool) is only available for Windows PCs. A Mac version is still in development.

Release Note for Software V2.0.0

Release Date: 08/05/2025

At AlgoForce, we are deeply committed to continually investing in research and development to enhance the performance and user experience of our detectors. We proudly provide these improvements to our customers through free software upgrades — and we've done it again.

Just like smartphones and other advanced electronic products that require continual software upgrades to unlock new features, improve performance, and enhance user experience, the E1500 series also evolves through ongoing software development. This ensures your detector remains at the cutting edge without the need to buy new hardware.

Version 2.0.0 represents the most significant update to the detector's interface and usability since the launch of the E1500. It is highly recommended that all E1500 and E1500 Plus users upgrade to take full advantage of the new features and improvements.

What's New

- **Dual User Modes: Standard & Advanced**

This version introduces two selectable user modes to better suit different experience levels. Users can seamlessly switch between modes to match their detecting style and skill level.

- **Standard Mode** simplifies the interface for beginners, focusing on ease of use.
- **Advanced Mode** provides greater control and customisation for experienced users.

- **Improved Menu Layout & Navigation**

Menus have been reorganised for more intuitive navigation.

- **Enhanced Visual Feedback**

Updates to on-screen messaging improve clarity and usability, enhancing overall interaction with the detector.

Note:

- *Please refer to the Software Upgrade Instructions on page 23 of the user manual to perform the software upgrade.*
- *After upgrading from an older version, any customised coil size settings and coil calibration data will be reset. Once the upgrade is complete, be sure to calibrate the coil as you would with a new detector by following on-screen instructions under **Calibrate Coil** in Standard User Mode or **Coil Selection** in Advanced User Mode.*

Release Note for Software V1.1.3

Software Version 1.1.3 is designed for both the E1500 and the E1500 Plus. By default, the E1500 Plus comes pre-installed with this version unless a newer version becomes available.

For E1500 users, rest assured that all future software versions developed for the E1500 Plus will remain fully compatible with the E1500. Users can easily upgrade their E1500 using the binary update file provided for the E1500 Plus.

Software V1.1.3 includes the following updates and improvements:

1. Enhanced Display Theme Switching:

- Previously, switching between dark and light display themes was only possible through the Miscellaneous settings menu.
- Now, users can switch display themes from anywhere by holding the Backlight/Theme button, providing greater convenience and ease of use.

2. New Audio Settings in Pinpoint Mode:

- Added 5 Tones Inv. and 100 Tones Inv. audio settings, offering an alternative feedback option.
- These settings take advantage of human sensitivity to high-pitched sounds to better target identification:
 - **5 Tones and 100 Tones:** Best for identifying highly conductive targets with higher target IDs.
 - **5 Tones Inv. and 100 Tones Inv.:** Ideal for detecting small items, such as gold nuggets, with lower target IDs, as higher-pitched tones are used to highlight these signals.

User Manual Revision History

Date	Description
11 Oct 2025	Initial release of the user manual V3.0.0.
11 Dec 2025	Received feedback and manual updates from users, including a new Button Functions page and several improvements.
10 Sep 2026	Initial release of the user manual V4.0.0.