VANQUISH 440/540 USER MANUAL

POWERED BY Multi-IQ
Simultaneous Multi-Frequency Technology

MINELAB

Contents

Quick Start

1 Turn On

2 Wait For 5 Seconds

3 Go Detecting

Search Modes

Press the Search Mode button to select the next Search Mode.

The VANQUISH 440 and 540 have four Search Modes that each have unique target separation and depth abilities. Choosing the right Search Mode will help you find more of what you're looking for.

COIN

Find common modern coins from around the world while ignoring trash in parks and at the beach.

Coin Mode is recommended for trashy locations because it has the best target separation abilities of all the modes. This means you won't miss good targets that are buried directly next to ferrous trash.

The default discrimination pattern for this mode rejects all ferrous (iron) targets and also rejects small non-ferrous trash such as foil.

JEWELLERY

Recover precious jewellery no matter where it was lost.

Jewellery Mode balances target separation and depth, making it an excellent all-rounder between Relic Mode and Coin Mode. Unlike the other Modes, Jewellery Mode tones are adjusted to ensure that fine gold jewellery is not classified as trash. This makes Jewellery Mode ideal for finding jewellery of all shapes, sizes, and metal composition.

The default discrimination pattern for this mode rejects only ferrous (iron) targets.

RELIC

Locate relics deep and forgotten in time in fields and forests.

Relic Mode has the best detection depth of all of the modes but slightly reduced target separation ability. This means you can detect as deep as possible, to find long-lost treasures.

The default discrimination pattern for this mode rejects all ferrous (iron) targets and also rejects small non-ferrous trash such as foil.

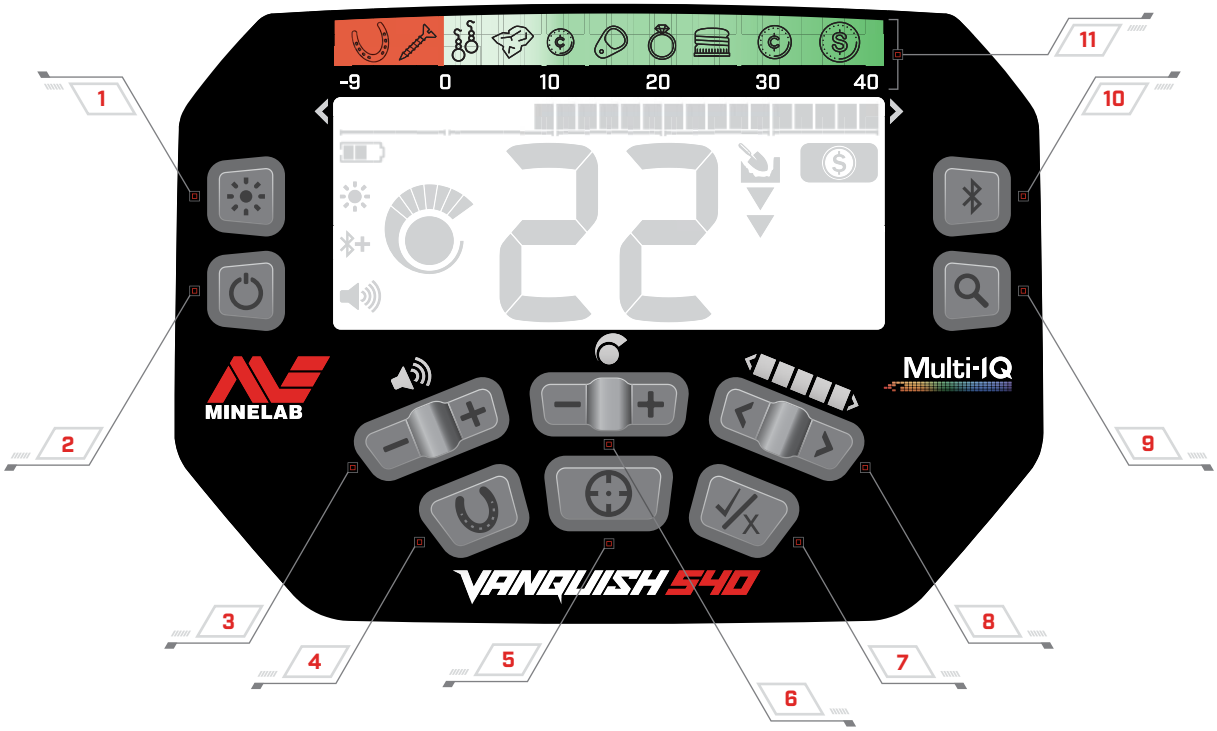
CUSTOM

A customisable user mode.

This Mode is for saving your favourite Search Mode and your own discrimination pattern. You can adjust the Discrimination Pattern in this mode without losing your changes when the detector is powered off. See "Store a Custom Search Mode" on page 13 for instructions.

The default discrimination pattern rejects all ferrous (iron) targets, and also rejects a broad range of non-ferrous trash such as foil, pull-tabs, and bottle caps.

Controls



1. Backlight On/Off (540 only)

Turns the backlight on and off (page 6).

2. Power On/Off

Turns the detector on and off.

Press and hold from Off (7 seconds) to restore factory settings (page 20).

3. Volume Adjust / Iron Volume Adjust

Adjusts the audio Volume Level (page 6).

Press and hold the All-Metal button, then use Volume Buttons to adjust Iron Volume. (page 6).

4. All-Metal

Turns on/off the All-Metal Discrimination Pattern to detect all metal targets, including iron (page 14).

Long-press to toggle the Iron Bias (540 only) (page 7).

5. Pinpoint

Press and hold to enable Pinpoint to locate the exact position of a target prior to recovery (page 8).

6. Sensitivity

Adjusts the Sensitivity Level (page 7).

7. Accept/Reject

Accepts or Rejects targets by turning on/off individual Discrimination Segments (page 12).

8. Discrimination Pattern Edit

Navigates left and right to select individual Discrimination Segments when editing a Discrimination Pattern (page 13).

9. Search Mode

Selects the next available Search Mode (page 3).

Long-press to store the current Search Mode Discrimination Pattern to the Custom Search Mode (page 13).

10. Bluetooth On/Off (540 only)

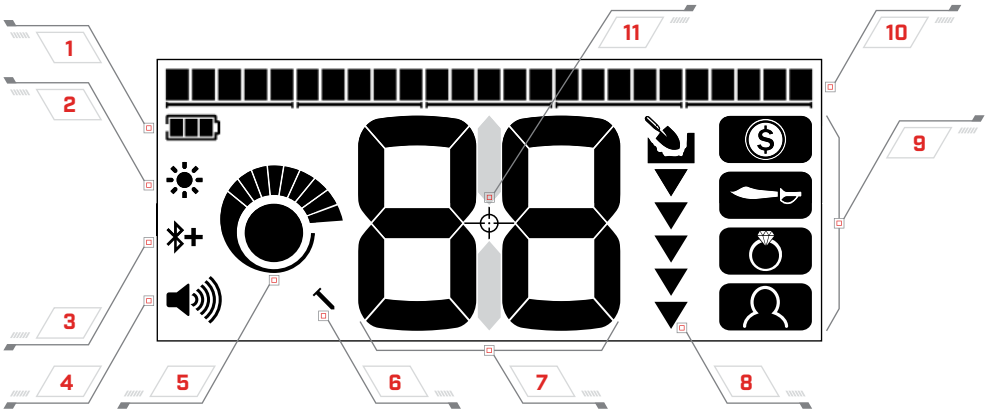
Enables Bluetooth for connection of wireless headphones (page 11).

Long-press to enable Bluetooth pairing for connecting new headphones (page 11).

11. Target Identification Guide

A reference guide indicating the types of targets that can be found for the corresponding Target Identification Segment.

Display



1. Battery Level

Indicates the current battery level (page 15).

2. Backlight Indicator (540 only)

Indicates that the backlight is On (page 6).

3. Bluetooth Indicator (540 only)

Indicates that Bluetooth wireless audio is On (page 11).

Standard Bluetooth

Bluetooth Qualcomm® aptX™ Low Latency for optimum wireless audio performance

4. Volume Level

Displays the detector audio volume (page 6).

5. Sensitivity Level

Displays the Sensitivity level (page 7).

6. Iron Bias Indicator (540 only)

Indicates that Iron Bias is set to 'Low' (page 7).

7. Target Identification Number

Indicates the numerical value of a detected target, allowing the identification of an object before digging. For example, a US quarter will always display the same Target Identification (ID) Number.

Negative numbers are ferrous, positive numbers are non-ferrous from fine gold (low ID's) to large silver (high ID's).

8. Depth Gauge

Shows the approximate depth of a detected target (page 10).

9. Search Modes

Displays the active Search Mode (page 3).

10. Discrimination Segments

Represents groupings of Target Identification Numbers as a single segment on a scale. Segments can be turned on and off to create a Discrimination Pattern (page 12).

Discrimination Segments align with the Target Identification Guide.

11. Pinpoint Indicator

Indicates that Pinpoint is enabled (page 8).

Detector Settings

BACKLIGHT

The VANQUISH 540 has a red backlight for detecting in low-light situations. The Backlight is turned off by default at each start-up to reduce battery consumption.

Press the Backlight button to turn the backlight on or off. The Backlight Indicator appears on the display when the backlight is on.

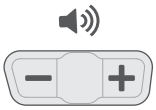
The Backlight button

The Backlight indicator

VOLUME

The Volume control changes the loudness of target signals.

Use the Volume Minus and Plus buttons to adjust the Volume Level. Each press will decrease/increase the volume by one level.



The Volume adjustment buttons

A low tone will sound when the maximum or minimum volume level is reached.

The Volume Level indicator on the display shows the current approximate Volume Level. Each bar represents two levels.

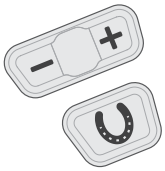
The Volume Level indicator showing maximum volume (levels 9 or 10)

IRON VOLUME (540 only)

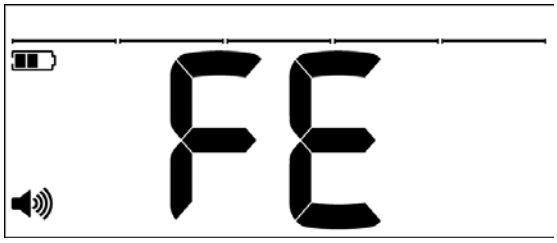
The VANQUISH 540 allows you to control the volume level of the Iron Tone.

This advanced setting can be useful in areas of dense ferrous trash, or highly mineralised ground, as it lets you hear the ferrous response without being overwhelmed by it.

1. Hold-in the All Metal button, then press either the Volume Plus or Minus button to begin editing the Iron Volume. The display will show 'FE' and the detector will play a short Iron tone at the current Iron Volume level.



A Volume button must be pressed within 1.5 s of holding down the All Metal button, otherwise the Iron Bias setting will toggle instead. Once the detector shows 'FE' the Iron Bias setting will not toggle.



The Volume Indicator on the display will show the current Iron Volume level whilst 'FE' is shown on the display.

2. Keeping the All Metal button held down, continue to adjust the Iron Volume level to your desired setting using the Volume Plus/Minus buttons. The Iron Tone will sound after each button press indicating the new Iron Volume level.
3. Release the All Metal button and the 'FE' will disappear from the display.

Once the Iron Volume has been adjusted, the detector will remember the setting next time you turn it on, so you only have to set it once.

Detector Settings

SENSITIVITY

The VANQUISH Series detectors are highly sensitive and have adjustable sensitivity. Setting the correct sensitivity level for individual detecting conditions will maximise detection depth.

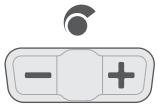
Always choose the highest stable sensitivity setting to ensure optimum performance.

The Sensitivity Level indicator on the display shows the current Sensitivity Level. Each bar represents one level.

The Sensitivity Level indicator (540 shown) showing maximum sensitivity (level 10)

To Adjust the Sensitivity Level

1. Hold the coil stationary, then use the Sensitivity Plus button to increase the sensitivity until false signals begin to occur.



The Sensitivity adjustment buttons

2. Reduce the sensitivity level by pressing the Sensitivity Minus button, just enough that the false signals disappear.
3. Sweep the coil over a clear patch of ground, and reduce the Sensitivity Level further if any ground noise is encountered.

Excessive Noise

Sometimes, excessive noise is encountered whilst detecting. This can be caused by environmental electromagnetic interference (EMI) from sources such as power lines, mobile phone towers, or other metal detectors.

If noise is a problem, try the following steps in order until the noise is eliminated.

1. Move away from local sources of Electromagnetic Interference (EMI).
2. Restart the detector, and wait for the automatic Noise Cancel process to complete.
3. If restarting the detector does not eliminate the excessive noise, then try reducing the Sensitivity Level.

Automatic Noise Cancel

VANQUISH Series detectors have an automatic Noise Cancel process that occurs every time the detector is powered on. It calibrates the detector so that excessive noise is not experienced.

For best results, the coil should be held stationary just above the ground until Automatic Noise Cancel is complete (indicated by two large dashes displayed on the Target ID Number field).

IRON BIAS

The Iron Bias feature is set to High by default, allowing the detector to correctly classify large or complex ferrous targets, such as rusty nails or bottle crown caps, as ferrous, which can be more easily rejected.

The VANQUISH 540 allows the Iron Bias level to be set to Low. This allows the detector to better identify coins amongst dense ferrous trash.

Set Iron Bias to Low (540 only)

The VANQUISH 540 Iron Bias is returned to its default setting each time the detector is powered on.

1. Long-press the All-Metal button for approximately 2 seconds.

The All-Metal button (long-press for Iron Bias)

2. The Iron Bias Indicator will appear on the display to the left of the Target Identification Number to indicate that Iron Bias is set to Low.

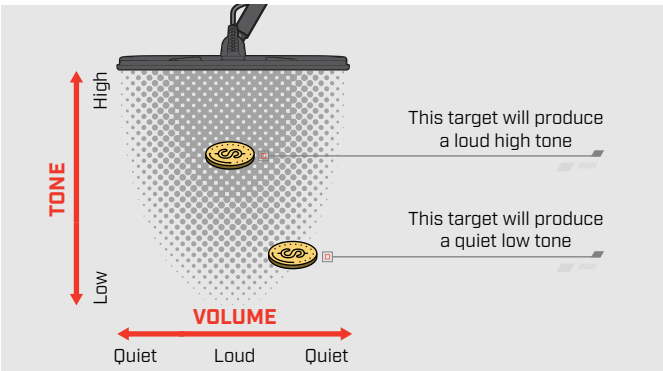
The Iron Bias Indicator

3. To return the Iron Bias setting to High, Long-press the All-Metal button for approximately 2 seconds. When Iron Bias is set to High, The Iron Bias indicator is off, and no icon is displayed.

Pinpoint

Pinpointing helps you to quickly narrow down the location of a buried target, allowing you to determine its exact location before digging.

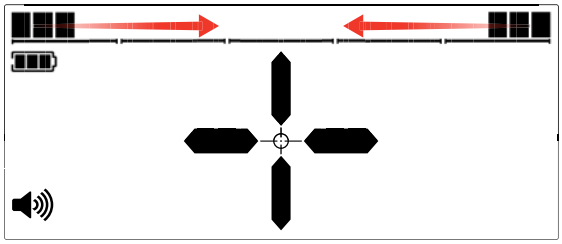
The difference in tone and volume will help to locate the position and depth of the target.



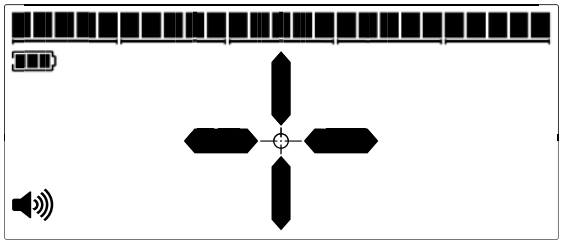
PINPOINT VISUALISATION

When Pinpoint is enabled, the target signal strength is displayed on the Discrimination Segments. This visualisation helps you to accurately locate the buried target.

As the centreline of the coil approaches the target, discrimination segments will fill from the outside towards the centre of the LCD. When the Discrimination Segments are all on, the target is directly beneath the centreline of the coil.



Weak/off-centre target signal: Fewer discrimination segments are on. The target is located nearer to the outside of the coil.



Strongest target signal: All discrimination segments are on. The target is located directly below the centreline of the coil.

LOCATE A TARGET WITH PINPOINT

1. Holding the coil away from the approximate target location, press and hold the Pinpoint button to enable Pinpoint. The Pinpoint Indicator cross-hairs will appear on the display.

The Pinpoint button

The Pinpoint Indicator cross-hairs

2. Keeping the coil parallel to the ground, sweep the coil slowly over the target location two or three times. This calibrates the Pinpoint function for more accurate pinpoint audio responses.
3. Locate the centre of the target by listening for the loudest signal and/or watching the Pinpoint Visualisation on the display.

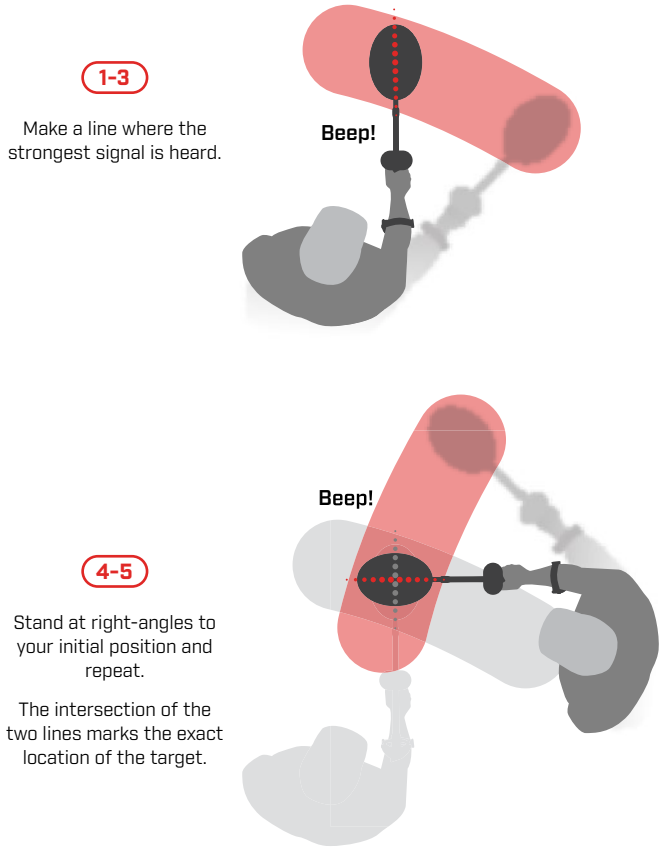
   Note, the Pinpoint function progressively masks the target response by reducing the Sensitivity with each sweep until only a very narrow target response remains. This helps identify the exact location of the target.
4. When all of the segments on the Discrimination Scale are on, the target will be below the centre of the coil.

Pinpoint

LOCATE A TARGET MANUALLY

It is possible to locate a target successfully without using Pinpoint, however this requires practice. This method may be required when a desirable target is surrounded by trash.

1. Sweep the coil slowly across the target location keeping the coil parallel to the ground.
2. Locate the centre of the target by listening for the loudest target signal response.
3. Make a mental note of the position, or mark a line on the soil with your shoe or a digging tool.
4. Move to one side so that you can pass the coil over the target at right angles to your initial direction.
5. Repeat steps 1 and 3 from your new position. The target is located where the two imaginary lines cross.



Depth Gauge

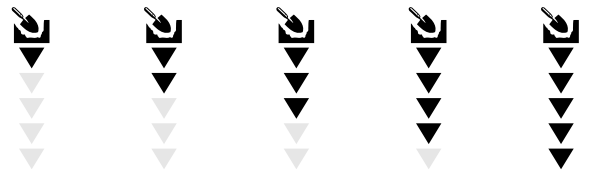
The Depth Gauge indicates the approximate depth of a detected target.

The Depth Gauge is a guide only. Fewer arrows indicate a shallower target, more arrows indicate a deeper target. The accuracy can vary depending on the target type and ground conditions.

After a target is detected, the Depth Gauge will remain on the LCD for up to 5 seconds, or until the next target is detected.

When there is no detection, the Depth Gauge icon and arrows are turned off.

Here is an example of the Depth Gauge reading and the approximate target depth for a US quarter.



50mm	100mm	150mm	200mm	>200mm
2"	4"	6"	8"	>8"

Wireless Audio (540 only)

Any standard Bluetooth® headphones or earbuds can be used with the VANQUISH 540, however the use of aptX™ Low Latency headphones is recommended (such as the Minelab ML 80 wireless headphones) for optimum wireless audio performance.

Turn Bluetooth On/Off

Press the Bluetooth button to turn Bluetooth on or off.

Long-press the Bluetooth button (2.5 seconds) to initiate pairing.

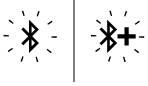
The Bluetooth button

If no connection is made within 5 minutes, Bluetooth will automatically turn off.

The Bluetooth icon appears on the display when Bluetooth is On. It displays the current Bluetooth connection status depending on its display state.

Rapid flashing: Detector is attempting to pair with Bluetooth devices.

Solid on: Detector is connected to Bluetooth/Bluetooth aptX-LL headphones.



Slow flashing: The detector is attempting to re-connect with existing Bluetooth/Bluetooth aptX-LL headphones (that were previously paired)

NOTE: If Bluetooth is active when the detector is shutdown, audio tones will be muted for 7 seconds at next start-up.

ML 80 Wireless Headphones

VANQUISH 540 Pro-Pack is supplied with Minelab ML 80 Bluetooth® headphones, powered by Qualcomm® aptX™ Low Latency audio. These headphones are also available as an accessory.

Minelab ML 80 Wireless Headphones
(shown with charging cable and optional audio cable)

For detailed information on pairing and other controls, refer to the instructions supplied with the headphones.

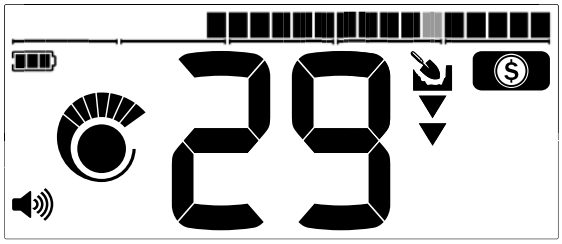
Target Identification

TARGET IDENTIFICATION NUMBER

Target Identification (Target ID) numbers range from –9 to 40 with ferrous (iron) targets ranging from –9 to 0.

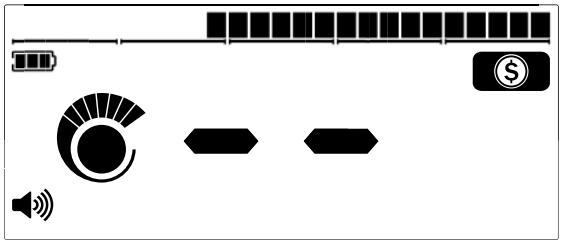
When a target is detected, it is represented as a number that appears on the Target Identification Number field on the display. This indicates the target's ferrous or non-ferrous properties for quick and easy identification.

For example, a US quarter has a Target ID of 29. This means that each time a Target with an ID of 29 is detected, there is a good chance that it will be a US quarter.



A Target ID number appears when a target is detected. This example shows the detection of a shallow US quarter. The corresponding Target ID Segment flashes upon detection (shown in grey).

The last detected Target ID remains on the display for five seconds or until another target is detected. If there is no detection or the detector passes over a target that it rejects, the display shows two large dashes.



Two large dashes on the Target Identification Number field when there is no detection.

DISCRIMINATION SEGMENTS

Discrimination Segments are located along top of the LCD. They display Target IDs grouped into zones.

Each Target Identification Number has a corresponding Discrimination Segment that will flash when a target with that ID is detected.

Discrimination Segments are turned on (accepted) or off (rejected) to create Discrimination Patterns (page 13).

ACCEPT/REJECT

Reject a Detected Target

1. When an accepted Target ID is detected, there is a target response, and a Target ID Number is displayed.
2. While the number is still displayed, press the Accept/Reject button to reject the detected target. Targets with the Target ID range represented by the corresponding discrimination segment will no longer give a response.

The Accept/Reject button

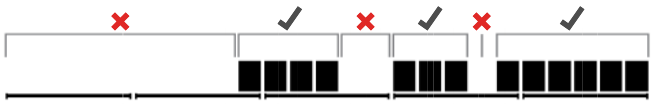
3. Each time the detector is powered On, the Discrimination Pattern is returned to the default pattern (except for the Custom Search Mode). To avoid losing your changes, use the Store function to save your settings to the Custom Mode. Read "Store a Custom Search Mode" on page 13 for more information.

Target Identification

DISCRIMINATION PATTERNS

Discrimination Segments can be turned on or off to either detect or ignore targets. All segments that are on will be heard (accepted), and all segments that are off will not be heard (rejected).

The combinations of accepted and rejected segments are called Discrimination Patterns.



An example Discrimination Pattern showing Accepted segments (✓) and Rejected segments (✖).

Discrimination Pattern Edit

You can create your own Discrimination Patterns to detect or ignore specific target types, so you can dig more treasure and less trash.

The preset Discrimination Patterns for each Search Mode can be edited. Note that changes to the Coin, Relic, and Jewellery Modes will return to their preset Discrimination Patterns each time the detector is powered on.

To avoid losing your changes, use the Store function to save your settings to the Custom Mode. Read "Store a Custom Search Mode" for more information.

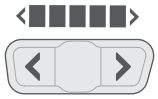
1. In any Search Mode, press the Accept/Reject button whilst not detecting a target (i.e. no Target ID Number is displayed).

The Accept/Reject button

2. 'Ed' will appear on the Target ID Number field to indicate that the Discrimination Pattern is being edited.

'Ed' on the Target ID Number field.

3. Use the Discrimination Pattern Edit arrow buttons to navigate to the segment you wish to adjust. Selected segments flash.



The Discrimination Pattern Edit buttons (Left/Right arrows)

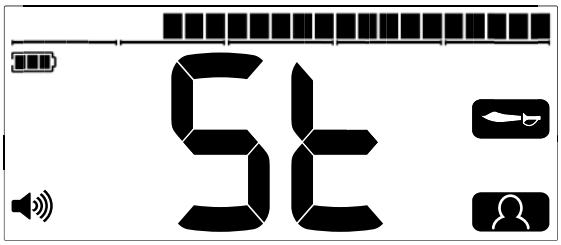
4. Press the Accept/Reject button to toggle the selected segment on or off.
5. Repeat steps 3 and 4 until you have created your Discrimination Pattern.
6. The Edit screen will time out after 3 seconds of inactivity.

Store a Custom Search Mode

Any Search Mode (Coin, Relic, or Jewellery), can be stored in the Custom Search Mode slot. The current detector settings and discrimination pattern will be saved for quick-access.

The unique target separation and depth characteristics of the Search Modes are also saved when the Custom Search Mode is stored (see "Search Modes" on page 3 for the attributes of each Search Mode).

1. Select and Edit the Search Mode you wish to save.
2. Long-press the Search Mode button (5 seconds). 'St' will appear on the Target ID Number display, and there will be a confirmation tone.



'St' appears on the Target ID Number Display. The Custom Search Mode icon and the source Mode icon flash twice.

3. The newly stored Custom Search Mode will now be active, and can be edited at any time.

Target Identification

ALL-METAL

The All-Metal function turns on all of the Discrimination Segments, so that all metal targets will be detected, including iron.

The VANQUISH 540 All-Metal discrimination pattern.

Detecting with All-Metal enabled is a strategy that guarantees you will not miss any targets, however you will also detect more trash.

> **NOTE:** For the 540 only, if you wish to optimise how trash sounds, you can adjust the Iron Volume (page 6).

Note, the Accept/Reject button and Discrimination Pattern Edit buttons cannot be used when All-Metal is enabled.

Enable All-Metal

1. Press the All-Metal button to enable All-Metal.

The All-Metal button

2. All of the Discrimination Segments will turn on and all metal objects will be detected.
3. To disable All-Metal, press the All-Metal button again. The Discrimination Pattern will return to its last-used state.

Using All-Metal to Check a Target

All-Metal can be used to check a non-ferrous detection to see if it also contains ferrous material.

If the target gives a mixed response (both non-ferrous and ferrous) once All-Metal is enabled, then there is a chance that the target is a large iron object or a crown bottle cap.

If there is a repeatable non-ferrous response, then the target does not contain iron. This means that the target is more likely to be a good (non-ferrous) target.

Creating Your Own Discrimination Pattern

Obtain some desirable targets (e.g. coins in your local currency) and wave each one over the detector coil at a range of heights. The Target ID for each target will be displayed.

Note, you may need to enable All-Metal to make sure your target isn't discriminated during this process.

Discrimination patterns (including the Search Mode preset patterns) typically ignore ferrous targets, since these are most often trash. It is worth noting that some countries have ferrous coins, so it's a good idea to check the Target IDs of the coins you want to find so that they aren't accidentally masked.

You can keep a list of the Target ID numbers and use it to create a discrimination pattern that specifically accepts (detects) those Target IDs for a more productive detecting session.

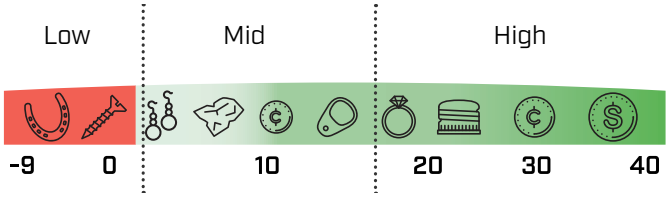
TARGET TONE

Groups of Target IDs are assigned Target Tones of different pitch so that the operator can broadly classify the Target ID without having to look at the display.

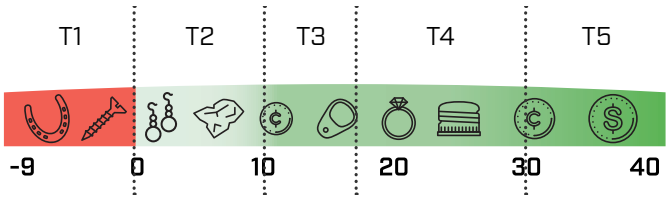
VANQUISH 440 has three Target Tones: Low, Mid, and High.

VANQUISH 540 has five Target Tones: T1 to T5.

The tone break position is the point on the discrimination scale at which the Target Tone changes from one pitch to another. Note that the exact tone break positions vary slightly for each Search Mode.



VANQUISH 440 tone break positions (approximate).



VANQUISH 540 tone break positions (approximate).

Batteries and Charging

The VANQUISH Series is compatible with both rechargeable and non-rechargeable AA batteries.

> **WARNING:** Never use a combination of non-rechargeable and rechargeable batteries in the detector, as this may result in damage to the detector or batteries.

> **WARNING:** There is a risk of explosion if the battery is replaced by an incorrect type.

BATTERY LEVEL

The Battery Level indicator shows the current battery level.


The battery Level Indicator

Note that rechargeable and non-rechargeable batteries have different discharge rates, therefore the Battery Level Indicator is approximate only.

Low Battery

If using non-rechargable batteries, the Battery Level Indicator will flash for approximately 20 minutes before automatic shut-down.

If using rechargeable batteries, the Battery Level Indicator will display a single battery segment for approximately 20 minutes before automatic shut-down.

The detector will play a short audio tune when the battery enters the Low Battery state (with flashing indicator). The volume will be limited in this state to prolong battery life without affecting detector performance.

Automatic Shut-Down

When the battery level is critically low, the detector will automatically shut-down. 5 seconds before automatic shut-down, 'bF' displays on the Target ID Number, accompanied by a shut-down audio tune.

'bF' on the Target ID Number field.

Note that when using some brands/types of rechargeable batteries, the detector may not show 'bF' before automatic shut-down.

Battery Run/Charge Times

Minelab rechargeable AA NiMH batteries have an approximate charge-time of 8 hours, and a run-time of approximately 11 hours.

Non-rechargeable AA alkaline batteries have a run-time of approximately 10 hours.

RECHARGEABLE BATTERIES

The VANQUISH 540 and VANQUISH 540 Pro-Pack are supplied with four rechargeable AA NiMH batteries and a battery charger. These accessories are also available to purchase separately.


Minelab AA NiMH Battery Charger


Minelab rechargeable AA NiMH batteries

For detailed instructions, compliance and safety information for the Minelab AA NiMH Battery Charger, refer to the instructions included with the charger.

> **WARNING:** The Minelab NiMH Battery Charger must only be used to charge NiMH rechargeable batteries.

Detector Care and Safety

- Wash your hands before handling the detector after applying sunscreen or insect repellents.
- Do not use solvents to clean. Use a damp cloth with a mild soap detergent.
- Never allow the detector to come into contact with gasoline/petrol or other petroleum-based liquids.
- Avoid getting sand and grit in the shafts and fastenings (e.g. coil yoke assembly and camlocks). If sand and grit accumulates in these parts they should be wiped clean with a damp cloth.
- Do not bring the detector or accessories into contact with sharp objects as this may cause scratches and damage.
- If the shafts become noticeably scratched, wipe them thoroughly with a damp cloth.
- Do not leave the detector in excessive cold or heat longer than necessary. Covering it when not in use will help protect it. Avoid leaving it in a hot vehicle.
- Ensure the coil cable is in good condition and not subject to undue stress.
- Take precautions when transporting or storing the detector. Although the detector is constructed from the highest quality materials and has undergone rigorous durability tests, the display screen could be prone to scratching or serious damage if not treated with due care.
- Do not expose the detector to extreme temperature conditions. The storage temperature range is from -20°C to +70°C (-4°F to +122°F).
- Do not expose accessories not listed as waterproof to liquid/moisture or excessive humidity.
- Do not allow children to play with the detector or accessories, small parts are a choking hazard.
- Only charge rechargeable batteries and accessories according to the instructions provided.
- Avoid charging rechargeable batteries and accessories in extreme temperature conditions.
- Remove batteries prior to air transportation.

Error Codes

Some detector faults will display an Error Code on the Target ID Number field. Try the recommended actions shown below before contacting an Authorised Service Centre.

Coil Disconnect

'Cd' will appear on the Target ID Number in the event of a Coil Disconnect Error.

In the event of a Coil Disconnect Error, follow these steps:

1. Check that the coil connector is connected properly at the back of the control unit.
2. Check the coil cable for damage.
3. Check the coil connector pins are free of dirt and debris.
4. Check the coil for visible signs of damage.
5. Try another coil if you have one available.
6. Perform a Factory Reset by powering off the detector, then press and hold the Power button for 7 seconds (see “Factory Reset” on page 20.)
7. If the error still remains, return the detector to your nearest Authorised Service Centre for repair.

System Error

System Error code ‘E’ is accompanied by an Error Code Number e.g ‘E2’. The detector will shut down 5 seconds after reporting a system error.

Example Error Code ‘E2’ displayed on the Target ID Number

In the event of a System Error, follow these steps:

1. Restart the detector to determine if the error still remains.
2. Confirm the coil is attached correctly.
3. Perform a Factory Reset by powering off the detector, then press and hold the Power button for 7 seconds (see “Factory Reset” on page 20.)
4. If the error still remains, return the detector to your nearest Authorised Service Centre for repair.

Troubleshooting

Detector does not turn on, or turns off by itself (with or without 'bF' indication)

1. Charge or replace the batteries.

Erratic/excessive noise

1. Move away from local sources of Electromagnetic Interference (EMI).
2. Restart the detector and wait for Automatic Noise Cancel to complete.
3. Reduce the Sensitivity level (page 7).

No sound – Wired headphones

1. Check that the detector is on, and start-up has completed.
2. Check that the headphones are plugged in.
3. Check that Volume is set to an audible level.
4. Unplug the headphones and confirm that the detector speaker is audible.
5. If available, try using a different set of headphones.

No sound – ML 80 Headphones

1. Check that the headphones are turned on.
2. Check that detector Bluetooth is turned on and paired with Bluetooth headphones (i.e. the Bluetooth icon is steady on).
3. Check that the headphones are charged.
4. Check that the detector Volume is set to an audible level.
5. Ensure the volume control on the headphones is set to an audible level.
6. Try a different set of Bluetooth headphones.
7. Try wired headphones.

ML 80 Headphones will not pair

1. Try powering off the ML 80 headphones and then re-pair.
2. Ensure the headphones are within 1 metre (3-feet) of the detector control unit, with no obstructions between the headphones and detector (including your own body).
3. Move away from sources of interference such as mobile phones.
4. If there are many other Bluetooth devices nearby, pairing may take longer. Move away from the area and try to pair again.
5. Perform a factory reset on the headphones and attempt to re-pair to the detector.
6. Pair the detector with different Bluetooth headphones, then attempt to re-pair ML 80 headphones to the detector.

Distortion/crackling heard in ML 80 Headphones when connected via Bluetooth.

1. Reduce the volume on the headphones until distortion is removed. Increase detector volume if required to compensate for the reduced volume.

Technical Specifications

	VANQUISH 340	VANQUISH 440	VANQUISH 540
Search Modes	Coin, Jewellery, All-Metal	Coin, Relic, Jewellery, Custom	
All-Metal Shortcut	No	Yes	
Custom User Search Profile	No	Yes	
Operating Frequencies (kHz)	Multi-IQ		
Noise Cancel	Auto (19 Channels)		
Bluetooth Audio	No		Yes
Iron Bias	High		High (default), Low
Sensitivity	4 levels	10 levels	
Volume	3 levels	10 levels	
Iron Volume	Fixed		10 levels
Target Tones	3 tones (Low, Mid, High)		5 tones
Discrimination Segments	5 segments	12 segments	25 segments
Discrimination Notch	No	Yes	
Pinpoint Mode	No	Yes	
Target ID's	−9 to 40		
Depth Indicator	4 levels	5 levels	
Length	Extended: 145 cm (57 in) Collapsed: 76 cm (30 in)		
Weight (incl. batteries)	1.2 kg (2.6 lbs)		1.3 kg (2.8 lbs)
Display	Monochrome LCD		Monochrome LCD with red backlight
Supplied Coil	V10 10"×7" Double-D		V12 12"×9" Double-D
Audio Output	In-built loudspeaker Wired 3.5 mm (1/8") headphones		In-built loudspeaker Wired 3.5 mm (1/8") headphones Bluetooth wireless audio
Supplied Headphones	—	Wired 3.5 mm (1/8") headphones	
Supplied Batteries	4 × AA Alkaline non-rechargeable		4 × AA NiMH rechargeable
Additional Included Accessories	Getting Started Guide	Getting Started Guide Rain Cover Armrest strap V10 skidplate	Getting Started Guide Rain Cover Armrest strap V12 skidplate
Waterproof	Coil to 1 m (3.3 ft)		
Water Resistant	Control box (with Rain Cover attached)		
Operating Temperature Range	−10°C to +40°C (+14°F to +104°F)		
Storage Temperature Range	−20°C to +70°C (−4°F to +158°F)		
Key Technologies	Multi-IQ		Multi-IQ, Bluetooth, aptX™ Low Latency

VANQUISH 540 PRO-PACK	VANQUISH 540 Pro-Pack is based on the standard VANQUISH 540 with the following differences: Includes Bluetooth wireless headphones and a V8 8"×5" Double-D coil and a V8 skidplate. Excludes Wired 3.5 mm (1/8") headphones.

Equipment may vary according to the model or items ordered with your detector. Minelab reserves the right to respond to ongoing technical progress by introducing changes in design, equipment and technical features at any time.

For the most up-to-date specifications for your VANQUISH detector, visit www.minelab.com

Factory Reset

The Factory Reset function returns all detector settings, Search Modes, and Discrimination Patterns to their Factory Preset state.

1. Ensure the detector is turned Off.
2. Press and hold the Power button (for approximately 7 seconds).

The Power button

> **NOTE:** If another button is pressed whilst the power button is held down, the detector will not perform the Factory Reset and will start normally once all buttons have been released.

3. 'FP' will appear on the Target ID display, indicating that Factory Presets have been restored.

'FP' will appear on the Target ID display when Factory Presets are restored.

4. Release the Power button. Automatic Noise Cancel will begin when Factory Reset is complete.

DISCLAIMER

The Minelab metal detector described in this instruction manual has been expressly designed and manufactured as a quality metal detector and is recommended for treasure and gold detecting in non-hazardous environments. This metal detector has not been designed for use as a mine detector or as a live munitions detection tool.

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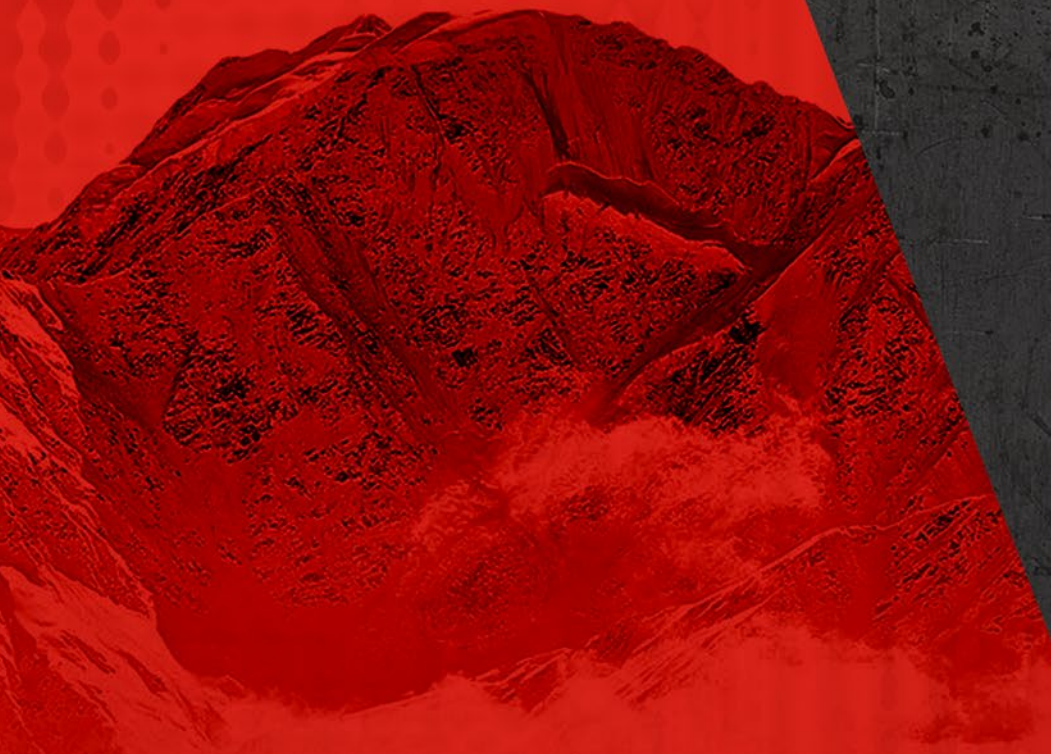
Bluetooth™ Qualcomm® aptX™ Low Latency

COMPLIANCE STATEMENT FOR CANADA

This product meets the applicable Innovation, Science and Economic Development Canada technical specifications.

INFORMATION RÉGLEMENTAIRE

Avis de conformité canadien Le présent produit est conforme aux spécifications techniques retenues par l'Innovation, Sciences et Développement économique Canada (ISDE).



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