

| AURIX 900

USER MANUAL

ENGLISH



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ASSEMBLY

Prepare your detector for use.



1 Attach the search coil

Insert the lower shaft into the search coil mounting bracket. Align the holes, insert the bolt and fit the nut. Tighten it enough to allow the coil angle to be adjusted; do not overtighten.

2 Adjust the shaft length

Open the shaft locks. Extend the telescopic shaft to a comfortable length for your height, then close the locks. Check that the shaft sections do not slip and that all connections are secure.

3 Connect the search coil cable

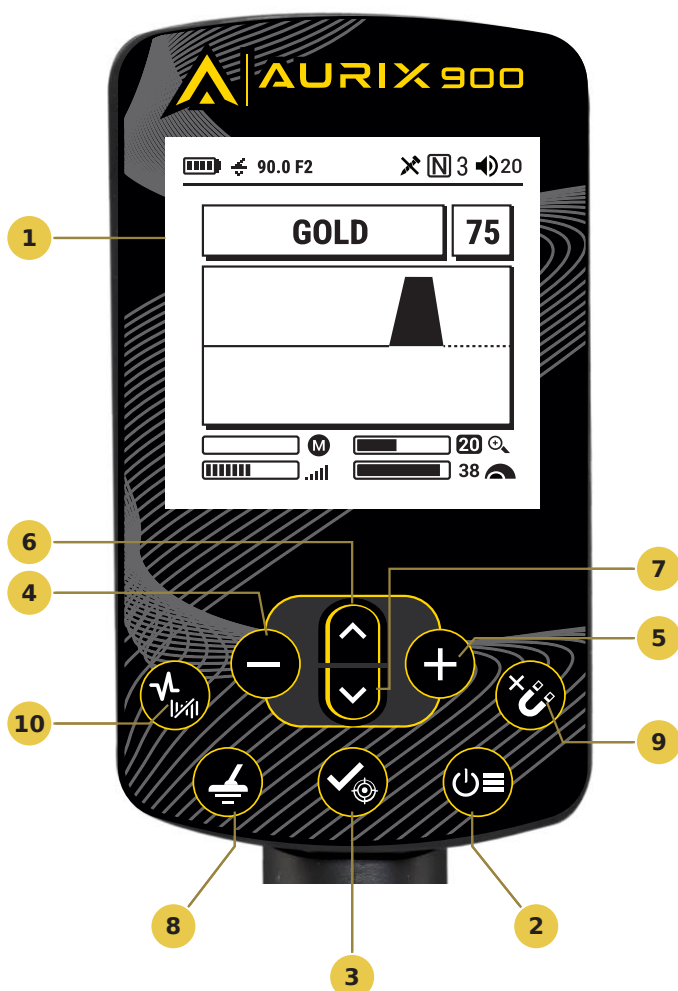
Wrap the cable around the shaft without pulling it too tight. Leave sufficient slack for coil movement. Align the cable connector with the coil socket on the control unit, insert it and hand-tighten the locking nut.

4 Adjust the armrest strap

Place your forearm in the armrest. Adjust the strap so you can control the detector comfortably without restricting your arm. Check all connections before use.

DEVICE OVERVIEW

Control panel, buttons and connections



REAR PANEL



1 LCD screen

Displays target information, selected settings and detector status.

2 Power / Menu

Turns the detector on or off and provides access to the settings menu.

3 Pinpoint / Confirm

Pinpoints the target location and confirms menu selections.

4 Minus (-)

Decreases sensitivity or the value of the selected setting.

5 Plus (+)

Increases sensitivity or the value of the selected setting.

6 Up

Moves upward through modes and menu options.

7 Down

Moves downward through modes and menu options.

8 Ground Balance

Used to perform the ground balance procedure.

9 Iron Reject

Controls the Iron Reject function.

10 Frequency / Noise Cancellation

Press and release to change the operating frequency (7, 14, 22, 36 kHz, MF1, MF2 or MF3).

Press and hold for 2 seconds, then release, to start Noise Cancellation. The detector automatically scans the channels, selects the most suitable channel and remains on it.

11 Speaker

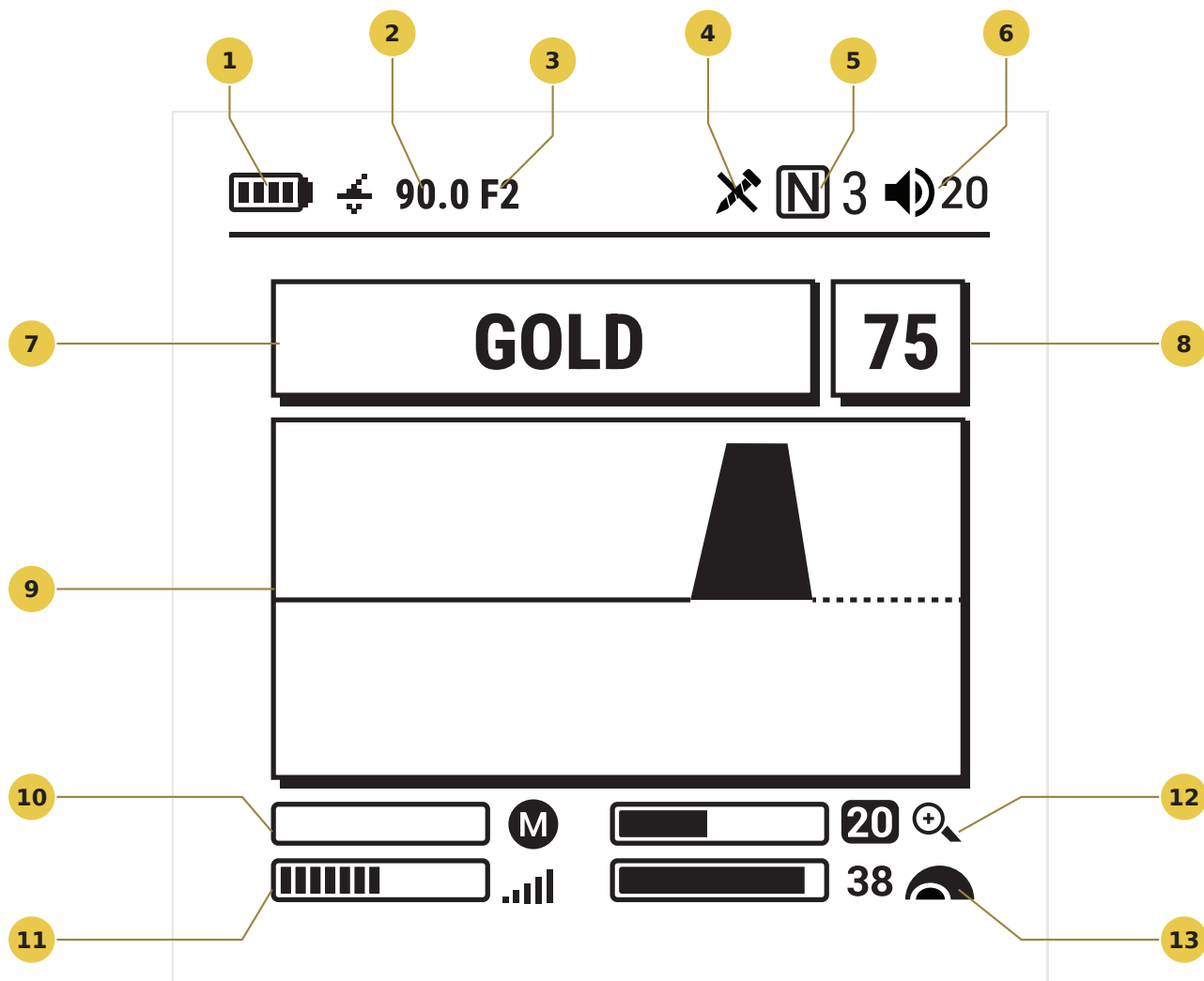
Outputs target tones and audible alerts.

12 Search coil socket

Connection socket for the search coil cable.

SCREEN OVERVIEW

Indicators on the Dynamic Metal screen



INDICATORS

- | | |
|------------------------------|----------------------------|
| 1 Battery level | 8 Target ID |
| 2 Ground Balance value | 9 Oscilloscope |
| 3 Frequency indicator | 10 Magnetic mineralization |
| 4 Iron Reject indicator | 11 Signal strength |
| 5 Noise Cancellation channel | 12 Oscilloscope zoom |
| 6 Volume level | 13 Sensitivity |
| 7 Discrimination information | |

BATTERY INFORMATION

The Aurix 900 is powered by an internal lithium-polymer battery. Operating time varies according to the active features and settings. Functions such as vibration and screen backlighting affect battery life.

BATTERY

Internal

Lithium-polymer

CHARGING TIME

Approx. 6 hours

Full charge

CHARGING TEMPERATURE

0-35 °C

Recommended range

CHARGING

- 1 Charge the detector before first use.
- 2 Connect the USB end of the supplied cable to a suitable USB power adapter.
- 3 Connect the other end of the cable to the detector charging port.

USING A POWER BANK

When the battery is depleted, you can operate the detector from a power bank while charging the battery.

Connect the USB end of the cable to the power bank and the other end to the detector charging port.

BATTERY LEVEL

The battery icon on the screen indicates the remaining charge. As the battery level drops, the number of bars inside the icon decreases. Charge the detector when the level is low.



High level



Medium level



Low level

BATTERY WARNINGS

Do not leave the detector in extremely hot or cold environments. Only charge the battery within a temperature range of 0-35 °C. Contact an authorized FX Technology service centre for battery replacement.

HEADPHONE INFORMATION

Using wireless headphones with the optional Bluetooth module

OPTIONAL BLUETOOTH MODULE

The Aurix 900 has no wired headphone jack and does not support wired headphones. The standard version does not include a Bluetooth module. Wireless headphones can be used with a version equipped with the optional Bluetooth module, available at additional cost. The following procedures apply to that version.

PAIRING AND CONNECTION

1 Turn on Bluetooth

Press the Menu button. Use the direction buttons to select **Bluetooth**, then press Confirm. Select **On** to enable Bluetooth.

2 Search for your headphones

Put the headphones into pairing mode according to their user manual. Select **Search** in the Bluetooth menu and press Confirm. The detected devices will be listed.

3 Connect to the headphones

Use the direction buttons to select the headphones from the list, then press Confirm. Once connected, the headphone name appears under **Connected Device**.

4 Pair different headphones

To remove the current pairing, select **Forget** and press Confirm. Put the new headphones into pairing mode, repeat **Search** and select them from the list.

VOLUME SETTING

Use the **Audio** option in the Bluetooth menu to adjust the wireless headphone volume.

RECONNECTION

When Bluetooth is enabled, the detector attempts to connect to nearby previously paired headphones. If it does not connect, make sure the headphones are switched on and perform another search.

CORRECT USE

Comfortable posture, correct coil angle and a balanced sweep

ADJUST THE SHAFT LENGTH TO YOUR HEIGHT

Adjust the shaft length so that your body remains upright, your arm is relaxed and the search coil is approximately 5 cm above the ground. You should not need to lean forward or overextend your arm while searching.

UPRIGHT POSTURE

RELAXED ARM

APPROX. 5 cm

KEEP THE SEARCH COIL PARALLEL TO THE GROUND

 **CORRECT**



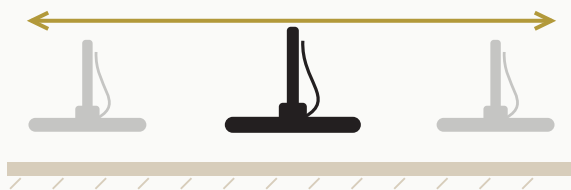
 **INCORRECT**



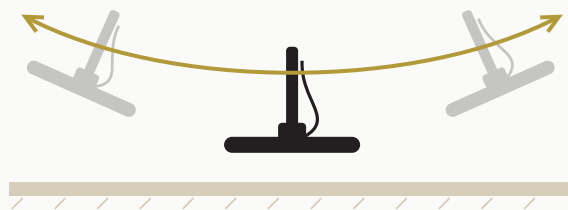
Keep the search coil parallel to the ground. Do not allow either edge of the coil to rise or touch the ground.

MAINTAIN THE COIL HEIGHT THROUGHOUT THE SWEEP

 **CORRECT**



 **INCORRECT**



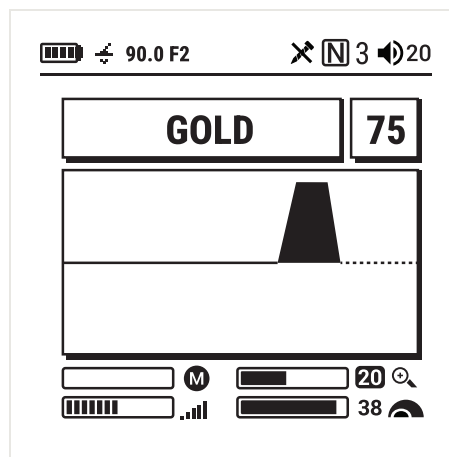
Maintain the same distance from the ground as you sweep the coil from side to side. Do not raise the coil at the ends of the sweep.

QUICK START

Basic steps for your first search



Startup screen



Dynamic Metal display

1 Prepare the detector

Complete the assembly, check all connections and adjust the shaft to your height. Charge the battery before first use.

2 Turn on the detector

Press and hold the **Power / Menu** button to turn on the detector. After the startup screen, wait for the search screen to appear.

3 Select the search mode

Select the mode suited to your search environment: **Field**, **Park**, **Beach** or **All Metals**. See the Search Modes section for details.

4 Adjust the sensitivity

Use the **Plus (+)** and **Minus (-)** buttons to adjust Sensitivity. Reduce it if the detector becomes unstable or produces excessive noise.

5 Run Noise Cancellation when necessary

Press and hold the **Frequency Shift / Noise Cancellation** button for **2 seconds**, then release it. The detector automatically scans the channels and selects the most suitable one.

6 Start searching

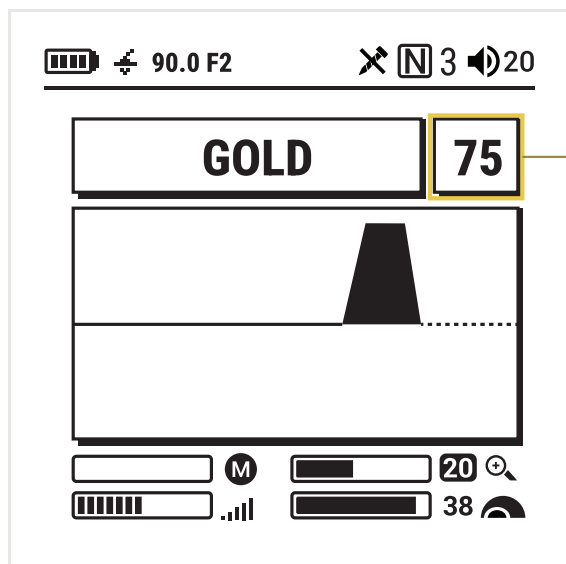
Keep the coil parallel to the ground and approximately **5 cm** above it while sweeping from side to side. Test different metals to learn the tones, Discrimination information and Target ID indications.

ELIMINATING UNWANTED TARGETS

Use the **Iron Reject** button to eliminate iron targets. Use the **ID Accept / Reject** setting in the menu to eliminate specific Target ID values.

TARGET ID

Target ID is a numerical identification value from **00-99** generated by the detector according to the conductive properties of the detected metal. It provides an indication of the type of metal the target may be.



NUMERICAL TARGET INFORMATION

On the Dynamic Metal screen, the Target ID is displayed in the box to the right of the **Discrimination information** field.

In this example, the ID value is **75**. This does not mean that the same metal is always being detected; different targets may produce similar ID values.

WHY CAN THE TARGET ID CHANGE?

The same target may produce more than one ID value across repeated sweeps. Target size, depth, orientation, metal composition and corrosion, as well as ground mineralization and sweep direction, can affect the reading.

Large targets may produce a higher ID than expected. Gold targets also cover a wide ID range and may produce values similar to metallic trash such as foil and pull tabs.

IF A TARGET IS DETECTED BUT NO ID APPEARS

To generate an ID, the detector must receive a sufficiently strong and processable signal. A very small or deeply buried target may be detected even when no ID value appears on the screen.

OSCILLOSCOPE DISPLAY

The oscilloscope displays the detected target signal graphically. Evaluate the graph together with the target tone, **Discrimination information** and Target ID. Test known metals to become familiar with the detector responses.

Target ID is an estimated indication. By itself, it cannot determine the metal type or value of a buried object with certainty.

SEARCH MODES

The Aurix 900 has four search modes: **Field**, **Park**, **Beach** and **All Metals**. Select the mode that best matches your search environment and intended use.

<div> <div> <div></div> <div>90.0 F2</div> </div> <div> <div></div> <div>N 3</div> </div> <div> <div></div> <div>20</div> </div> </div>	
MODE	PARK
GROUND BALANCE	90.0
AUDIO	20
THRESHOLD	5

SELECTING A MODE

- 1 Press the **Menu** button to open the settings menu.
- 2 Use the **Up / Down** buttons to select the **Mode** row.
- 3 Use the **Plus (+)** and **Minus (-)** buttons to select the desired mode. Press the **Menu** button to return to the search screen.

The Mode row is selected; Park mode is shown in this example.

01 FIELD

Designed for searches in fields, open terrain and similar outdoor areas.

02 PARK

Designed for parks, gardens and other areas frequently used by people.

03 BEACH

Designed for searches on dry or wet beach sand and in coastal areas.

04 ALL METALS

For searches where you want to evaluate different metal types, including iron-containing targets.

After selecting a search mode, evaluate the **Sensitivity** and **Ground Balance** settings according to the conditions at your search location.

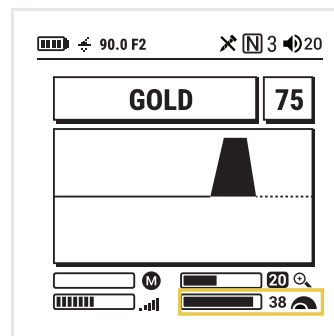
SENSITIVITY AND DEPTH

Sensitivity, Depth Calculation and Oscilloscope Zoom

01 SENSITIVITY

The maximum Sensitivity value is **44**. Adjust it on the search screen using the **Plus (+)** and **Minus (-)** buttons; follow the selected value on the indicator at the bottom right of the screen.

If the detector is noisy, run Noise Cancellation. If instability continues, reduce Sensitivity gradually.

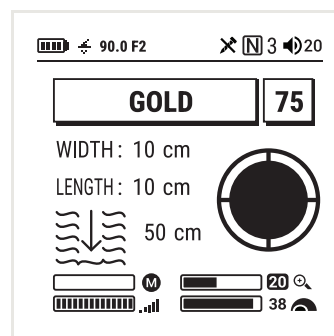


02 DEPTH CALCULATION

To enter Depth Calculation, press and hold the **Down** button for **2 seconds**, then release it.

In this mode, the detector operates similarly to **Pinpoint mode**. Move the search coil slowly.

1. Approach the detected target from four directions. From each direction, mark the point where the detector **first begins to produce a signal**. Join the marks to form a square or rectangular measurement area.
2. Measure the width and length of the marked area. Enter the measurements in centimetres in the **Width** and **Length** fields on the screen.
3. Position the search coil over the **exact centre** of the target and check the depth value shown on the screen.



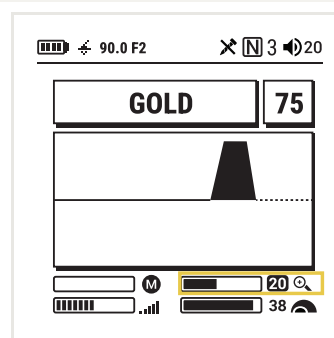
Width and Length:
dimensions of the marked area

03 OSCILLOSCOPE ZOOM

Available only in Dynamic Metal and Static.

Increase the value to make weak signals more visible on the graph; reduce it to focus on stronger signals.

It does not increase detection depth. It only changes the visibility of the oscilloscope graph.



GROUND BALANCE

Automatic Ground Balance

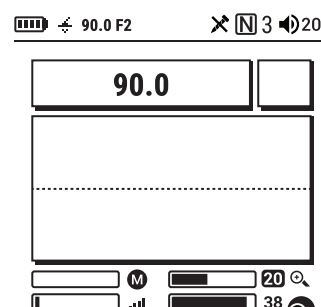
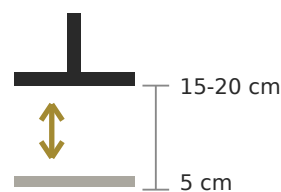
The Aurix 900 is designed to operate in **Field** and **Park** modes without ground balancing in many types of terrain. However, performing Ground Balance on highly mineralized ground can improve detector stability and depth performance.

Ground Balance can be performed in two ways: **Automatic** or **Manual**.

AUTOMATIC GROUND BALANCE

Perform Automatic Ground Balance in any search mode as follows:

- 1 Select an area that you are sure contains no metal.
- 2 To start Automatic Ground Balance, **press and hold the Ground Balance button for 2 seconds, then release it**. When **90.0** appears at the top of the screen, Ground Balance mode is active. Raise the search coil **15-20 cm**, then lower it until it is approximately **5 cm** above the ground. Pump the coil toward the ground with smooth, vertical movements without striking the surface.



- 3 The detector emits a **beep** when the Ground Balance value is updated. Continue pumping until you hear several beeps and check the values on the screen. Results close to one another, such as **85, 80, 83, 87**, are acceptable. Stop pumping. To exit Ground Balance, press and hold the **Up Arrow** button for **2 seconds**, then release it.

Values that are far apart, such as **80, 20, 50, 70**, may indicate interference. Leave Ground Balance at **90** and try different **Frequency Shift** and **Sensitivity** settings to eliminate the interference. If the detector then operates normally, try Ground Balance again. If the problem continues, leave the value at 90 in areas where Ground Balance cannot be performed.

- 4 When the detector is switched on, the Ground Balance value is **90**. If no beep is heard and the value does not change during Ground Balance, the ground is producing the same value as the current setting; therefore, the detector does not update it.

For experienced users: With small targets, a slightly positive setting that produces a faint response as the coil approaches the ground may provide better results. This method requires experience.

GROUND BALANCE

Manual Ground Balance and Ground Balance Values

Manual Ground Balance is performed by adjusting the value directly. It can be used when Automatic Ground Balance cannot be completed or when a small correction to the automatic setting is required. It takes practice and experience.

Automatic Ground Balance may be difficult on wet beach sand; alkaline or saltwater-saturated ground; areas with heavy metal trash; ploughed fields; and ground with variable or very low mineralization. Manual Ground Balance can be used in these conditions.

MANUAL GROUND BALANCE

- 1** Select an area free of metal. Open the menu and select **Ground Balance**.
- 2** Keeping the coil parallel to the ground, slowly pump it between **15-20 cm** and approximately **5 cm** above the surface without touching the ground. Listen to the ground response.

<div> <div> <div></div> <div></div> <div></div> <div></div> </div> <div>90.0 F2</div> <div> <div></div> <div></div> <div></div> <div></div> </div> <div>3 20</div> </div>	
GROUND BALANCE	90.0
AUDIO	20
THRESHOLD	5
PRO MODE	Dynamic Metal

If the sound increases as the coil is raised: The value is too low; increase it with (+).

If the sound increases as the coil is lowered: The value is too high; decrease it with (-).

- 3** The Ground Balance range is **00-99.9**. Adjust the value with the (+) and (-) buttons. Press once to change the value step by step, or press and hold for rapid adjustment.
- 4** Repeat until the ground response disappears. If it cannot be eliminated completely, compare the sounds produced while lowering and raising the coil. The setting is correct when there is no difference between the two responses.

GROUND BALANCE VALUES

0-25	Ground saturated with saltwater; wet alkaline soils
25-50	Ground with saltwater beneath a dry layer; moist alkaline soils
50-70	Average soil
70-90	Magnetically mineralized ground (magnetite, maghemite); black sand

SETTINGS

Menu Operation, Mode, Ground Balance and Audio

Briefly press the **Power / Menu** button to open the settings menu. Use the **Up / Down** buttons to move between options. Press **Plus (+)** to increase a value and **Minus (-)** to decrease it.

When an option has a submenu, press the **Confirm / Pinpoint** button to enter it. Use the **Menu** button to go back and return to the search screen.

01 MODE

Selects the search mode suitable for your environment and intended use. Select the **Mode** row in the menu, then change the selection with the **(+)** and **(-)** buttons.

Field · Park · Beach · All Metals

See the **Search Modes** section for descriptions of these modes.

<div> <div> <div></div> <div>90.0 F2</div> </div> <div> <div></div> <div>3 20</div> </div> </div>	
MODE	PARK
GROUND BALANCE	90.0
AUDIO	20
THRESHOLD	5

02 GROUND BALANCE

Allows the Ground Balance value to be adjusted manually. Select the **Ground Balance** row in the menu. Increase the value with **(+)** or decrease it with **(-)**.

For Automatic and Manual Ground Balance procedures, see the **Ground Balance** section on the previous two pages.

<div> <div> <div></div> <div>90.0 F2</div> </div> <div> <div></div> <div>3 20</div> </div> </div>	
GROUND BALANCE	90.0
AUDIO	20
THRESHOLD	5
PRO MODE	Dynamic Metal

03 AUDIO

Adjusts the detector's overall volume according to the search environment and your personal preference. Select the **Audio** row; increase the volume with **(+)** or decrease it with **(-)**.

The Audio setting is shared by all search modes and the last setting is retained after the detector is switched off and on.

To reduce battery consumption, keep the volume at a comfortable audible level and avoid setting it unnecessarily high.

<div> <div> <div></div> <div>90.0 F2</div> </div> <div> <div></div> <div>3 20</div> </div> </div>	
AUDIO	20
THRESHOLD	5
PRO MODE	Dynamic Metal
ID ACCEPT / REJECT	

SETTINGS

Threshold and Pro Mode

04 THRESHOLD

Threshold is the continuous background sound heard during a search. Adjust its level so weak signals from small or deeply buried targets can be noticed.

If Threshold is too loud, faint target tones may be lost in the background sound. If it is set too low, weak signals can also be difficult to notice.

Select the **Threshold** row in the menu. Use the **Plus (+)** and **Minus (-)** buttons to adjust the level from **1-5**.

<div> <div></div> <div>90.0 F2</div> <div> <div></div> <div>N 3</div> <div>20</div> </div> </div>	
THRESHOLD	5
PRO MODE	Dynamic Metal
ID ACCEPT / REJECT	
RECOVERY SPEED	50

Note: Keep the factory setting at first. As you gain experience, adjust Threshold to a level at which you can recognize faint target tones.

05 PRO MODE

Pro Mode selects the **display method** used to present target information on the screen. Five display options are available.

Select the **Pro Mode** row in the menu. Use the **(+)** and **(-)** buttons to select the desired display method.

<div> <div></div> <div>90.0 F2</div> <div> <div></div> <div>N 3</div> <div>20</div> </div> </div>	
PRO MOD	Dynamic Metal
ID ACCEPT / REJECT	
RECOVERY SPEED	50
FILTER	0

DISPLAY OPTIONS

Dynamic Metal

Vector

VDI

ICON

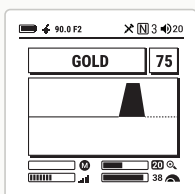
Static

The example menu screen shows **Dynamic Metal** selected.

PRO MODE DISPLAYS

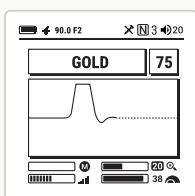
Five ways to display target information

01 DYNAMIC METAL



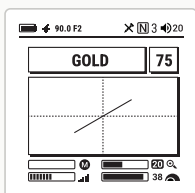
In **Dynamic Metal**, a moving oscilloscope trace appears at the center. Responses from non-precious metals move the trace down; precious metals and gold move it up. Its shape can help experienced users interpret single or multiple targets. Increasing **Oscilloscope Zoom** makes weak signals more visible but the trace more active. Lower values provide a steadier display focused on strong signals. Zoom affects only the display, not detection capability or depth.

02 STATIC



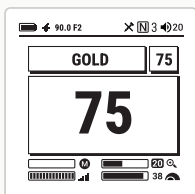
In **Static**, the oscilloscope trace also moves down for non-precious metals and up for precious metals and gold. Its trace differs from Dynamic Metal. Higher Zoom highlights weak signals; lower Zoom gives a steadier view of strong signals. Zoom changes only the display. The detector uses two different algorithms in this mode. If ground, environmental interference or hot rocks cause drift or false responses, briefly press and release **Confirm / Pinpoint** to **Reset**.

03 VECTOR



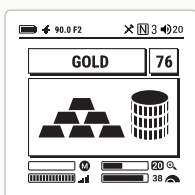
Vector presents the target signal on a two-axis graph, allowing the signal behaviour to be assessed visually in addition to Target ID. Ferrous and non-ferrous targets leave traces in different regions. The trace shape and position provide an extra clue and may help interpret bottle caps, foil, thin iron and some rusty targets.

04 VDI



VDI provides a simple display centred on a large Target ID. When the detector responds, you can check the ID easily and continue searching. Other detector functions remain unchanged; this view does not include an oscilloscope trace.

05 ICON



ICON offers a clear and simple display. It is useful for users who are beginning to learn the detector and prefer an easy-to-read view that presents more visual Discrimination information.

SETTINGS

ID Accept / Reject

06 ID ACCEPT / REJECT

Allows you to reject the ID values of targets you do not want the detector to report during a search. A rejected ID can be accepted again to restore the detection response and audio for targets producing that value.

1 Open the menu. Use the **Up / Down** buttons to select **ID Accept / Reject**. Press the **Confirm / Pinpoint** button to open the adjustment screen.

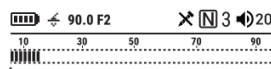
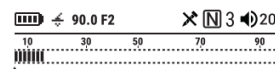
2 Use the **(+)** and **(-)** buttons to select the ID value you want to change. The selected ID is shown as a large number in the center of the screen, and its position is indicated by a cursor on the ID scale at the top.

3 Press **Confirm / Pinpoint** to change the selected ID between accepted and rejected. To accept a rejected ID again, select the same value and press the button once more.

4 When finished, press the **Menu** button to return to the settings menu, then press it again to return to the search screen.

ID ACCEPT / REJECT SCREEN

The screens below show the two selection states for the same ID.



FOR MORE EFFECTIVE REJECTION

During detection, the Target ID may not always remain fixed on a single number. ID variation can occur with all metal detectors. For more effective rejection, it is recommended that you also reject the value immediately below and immediately above the selected ID.

Example: If you want to reject ID **50**, also reject **49** and **51**.

Remember that desired targets producing these values may also be missed.

SETTINGS

Recovery Speed and Filter

07 RECOVERY SPEED

Recovery Speed determines how quickly the detector can respond to another target after detecting the first one. It helps separate closely spaced targets and is particularly important in areas with a high concentration of metal trash.

Select the **Recovery Speed** row in the menu. Use the **(+)** and **(-)** buttons to adjust the value between **10-80**. As the menu value increases, recovery becomes slower; as the value decreases, recovery becomes faster.

<div> <div> <div></div> <div>90.0 F2</div> </div> <div> <div></div> <div>3</div> </div> <div> <div></div> <div>20</div> </div> </div>	
RECOVERY SPEED	50
FILTER	0
TONE BREAK	15
GOLD DISCRIMINATION	

LOW VALUE

Improves separation of nearby targets, but detection depth may decrease.

HIGH VALUE

May provide a depth advantage, but reduces separation of nearby targets.

The recommended value for new users is 60. Very low values may cause continuous responses and noisy operation.

08 FILTER

Used to reduce interference caused by environmental **electromagnetic interference (EMI)**. The Filter has **two levels**. Select the **Filter** row in the menu and adjust it with the **(+)** and **(-)** buttons.

If interference is present, first try reducing it with the **Sensitivity** setting and the **Frequency Shift** function. If the interference continues, try the Filter.

<div> <div> <div></div> <div>90.0 F2</div> </div> <div> <div></div> <div>3</div> </div> <div> <div></div> <div>20</div> </div> </div>	
FILTER	0
TONE BREAK	15
GOLD DISCRIMINATION	
STEEL DISCRIMINATION	☐

Do not use the Filter unless necessary. Increasing the Filter level reduces detection depth. Use only the level required to eliminate the interference.

SETTINGS

Tone Break and Gold Discrimination

09 TONE BREAK

Tone Break lets you change the audio transition boundary between Target ID ranges. If the factory setting does not provide the sound separation you prefer, you can adjust the transition point to suit your needs.

Select the **Tone Break** row in the menu. Use the **Plus (+)** and **Minus (-)** buttons to change the transition value. The selected value determines the Target ID point above which targets are reported with a different tone.

90.0 F2

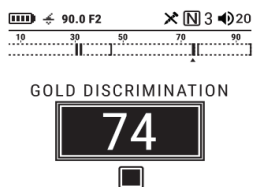
N 3 20

TONE BREAK	15
GOLD DISCRIMINATION	
STEEL DISCRIMINATION	☐
VOID DISCRIMINATION	☐

Note: Tone Break does not change a target's ID value or detection depth; it only customizes the audio discrimination boundary.

10 GOLD DISCRIMINATION

Evaluates whether a detected target is consistent with the gold group and displays **Gold Discrimination** information on the screen. To enable or disable the function, select **Gold Discrimination** in the menu and press the **Confirm / Pinpoint** button.



On the Gold Discrimination screen, you can include or exclude any desired ID numbers. Update the discrimination information according to targets found in your area, your own tests and your experience.

90.0 F2

N 3 20

GOLD DISCRIMINATION	
STEEL DISCRIMINATION	☐
VOID DISCRIMINATION	☐
VIBRATION	☐

Important: The discrimination result is an assessment and does not guarantee that the target is gold. Target size, shape, depth and orientation, as well as ground conditions and nearby metals, may affect the result.

SETTINGS

Steel Discrimination and Void Discrimination

11 STEEL DISCRIMINATION

Evaluates whether a detected target is consistent with the steel group and displays **Steel Discrimination** information on the screen. To enable or disable the function, select **Steel Discrimination** in the menu and press the **Confirm / Pinpoint** button.

Steel Discrimination helps you evaluate targets that contain iron or produce a steel-like response. Assess the result together with the **Target ID**, audio response and other discrimination information.

<div> <div></div> <div>90.0 F2</div> <div> <div></div> <div>3</div> <div>20</div> </div> </div>	
STEEL DISCRIMINATION	☐
VOID DISCRIMINATION	☐
VIBRATION	☐
BRIGHTNESS	80

Important: The discrimination result does not guarantee that the target is steel. Corrosion, target shape, position, depth and ground conditions may affect the result.

12 VOID DISCRIMINATION

Void Discrimination can only be enabled when **Pro Mode: Static** is selected. A correct **Ground Balance** must be performed before attempting void detection. Incorrect ground balance may cause misleading results. This feature does not directly prove the presence of a void; it evaluates variations in the ground.

<div> <div></div> <div>90.0 F2</div> <div> <div></div> <div>3</div> <div>20</div> </div> </div>	
VOID DISCRIMINATION	☐
VIBRATION	☐
BRIGHTNESS	80
AUTO BRIGHTNESS	☐

FOR RELIABLE EVALUATION

Different soil layers, mineralized rocks, moisture variations, excavated ground or backfilled areas may produce signals similar to a void. Therefore, use this feature in limited areas where a void is suspected, rather than randomly across large areas. Compare the suspected area with the surrounding normal ground; keep the search coil at a constant height and parallel to the ground, then scan again from different directions. Do not make a definite decision based on a single void signal. If the detector produces a void signal everywhere, check the Ground Balance. Repeat Ground Balance after changing the operating frequency or moving to a different soil type.

SETTINGS

Vibration, Display Lighting and LED Light

13 VIBRATION

Provides vibration feedback when a target is detected. It can be used alongside the audio alert and helps you notice target responses in noisy surroundings. Select **Vibration** in the menu, then press **Confirm / Pinpoint** to turn it on or off.

<div> <div>   90.0 F2 </div> <div>   3  20 </div> </div>	
VIBRATION	☐
BRIGHTNESS	80
AUTO BRIGHTNESS	☐
LED LIGHT	☐

14 BRIGHTNESS

Adjusts the LCD backlight level to suit ambient conditions and your preference. Select **Brightness** in the menu and change the level with the **Plus (+)** and **Minus (-)** buttons. Higher brightness may increase battery consumption.

<div> <div>   90.0 F2 </div> <div>   3  20 </div> </div>	
BRIGHTNESS	80
AUTO BRIGHTNESS	☐
LED LIGHT	☐
LANGUAGE	TR

15 AUTO BRIGHTNESS

When **Auto Brightness** is enabled, the display backlight does not remain continuously on. It turns on when a target is detected and switches off again after a short period. The illumination level is determined by the **Brightness** setting. Press **Confirm / Pinpoint** to turn the feature on or off.

<div> <div>   90.0 F2 </div> <div>   3  20 </div> </div>	
AUTO BRIGHTNESS	☐
LED LIGHT	☐
LANGUAGE	TR
SOUND TYPE	Polyphonic

16 LED LIGHT

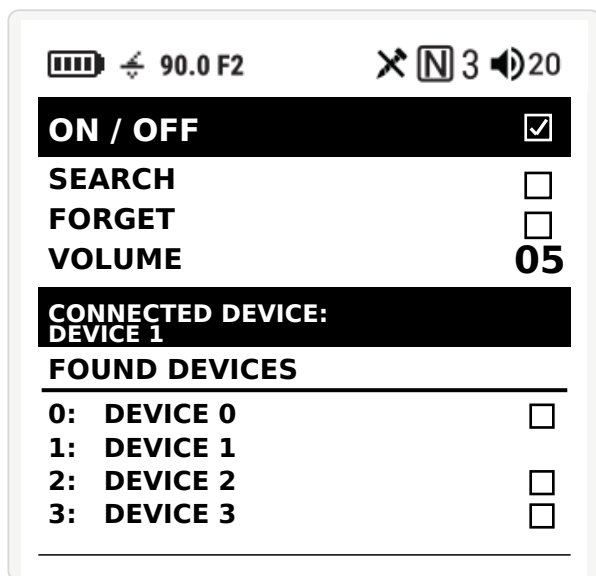
Illuminates the search area in low-light conditions. Select **LED Light** in the menu and press **Confirm / Pinpoint** to turn it on or off. Keep the light off when it is not needed to conserve battery power.

<div> <div>   90.0 F2 </div> <div>   3  20 </div> </div>	
LED LIGHT	☐
LANGUAGE	TR
SOUND TYPE	Polyphonic
COIL TYPE	35CM DD

SETTINGS

Bluetooth - optional wireless headphone connection

17 BLUETOOTH (OPTIONAL)





90.0 F2


3

20

ON / OFF ☒

SEARCH ☐

FORGET ☐

VOLUME **05**

CONNECTED DEVICE:
DEVICE 1

FOUND DEVICES

0: **DEVICE 0** ☐

1: **DEVICE 1** ☐

2: **DEVICE 2** ☐

3: **DEVICE 3** ☐

BLUETOOTH-EQUIPPED VERSION

Wireless headphones can be connected only to an **Aurix 900 equipped with the Bluetooth module**. The module is not included with the standard model; it is an optional, paid hardware upgrade.

NO WIRED HEADPHONE SUPPORT

There is no wired headphone port on the device. Headphones connect wirelessly only on the Bluetooth-equipped version.

A CONNECTION STEPS

1 ON

Open the Bluetooth menu and switch the function **On**.

2 SEARCH

Put the headphones in pairing mode and start **Search** on the detector.

3 CONNECT

Select the headphones in the found-devices list and confirm the connection.

4 FORGET

Select the paired headphones and use **Forget** to remove the saved pairing.

B CONNECTION TIPS

Keep the headphones close to the detector during initial pairing. If they do not appear in the list, check that pairing mode is active. Then turn Bluetooth off and on and repeat the search.

SETTINGS

Language, Sound Type and Coil Type

18 LANGUAGE

Sets the language used for the detector's menus and screen text. Select **Language** in the menu, then use the **Plus (+)** and **Minus (-)** buttons to choose either **TR - Turkish** or **EN - English**.

TR Turkish

EN English

  90.0 F2   3  20	
LED LIGHT	☐
LANGUAGE	TR
SOUND TYPE	Polyphonic
COIL TYPE	35CM DD

19 SOUND TYPE

Defines the character of the audio response from targets. Select **Sound Type** in the menu and use the **Plus (+)** and **Minus (-)** buttons to choose between **PWM** and **Polyphonic**. This selection does not change the Target ID value.

PWM

The sound changes with signal strength as you approach the target.

POLYPHONIC

The sound does not change according to target proximity.

  90.0 F2   3  20	
LED LIGHT	☐
LANGUAGE	TR
SOUND TYPE	Polyphonic
COIL TYPE	35CM DD

20 COIL TYPE

Lets you select the operating setting that matches the size of the search coil fitted to the detector. Select **Coil Type** in the menu, then use the **Plus (+)** and **Minus (-)** buttons to choose **30 cm DD** or **35 cm DD**.

  90.0 F2   3  20	
LED LIGHT	☐
LANGUAGE	TR
SOUND TYPE	Polyphonic
COIL TYPE	35CM DD

Important: The selected Coil Type must match the search coil fitted to the detector. Check this setting whenever you change the coil. An incorrect selection may adversely affect performance and target responses.

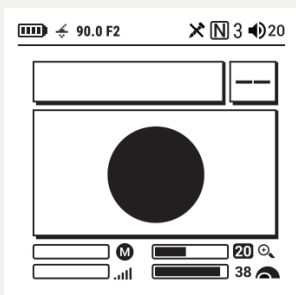
PINPOINT

Target Centering

01 LOCATING THE EXACT TARGET POSITION

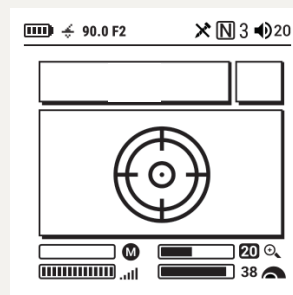
Pinpoint helps locate the center of a detected target and narrow the area to excavate. In normal search modes, you must move the search coil; in Pinpoint mode, the detector continues to respond even when the coil is held still over the target.

READY TO PINPOINT



When Pinpoint opens, the screen is ready for target centering.

TARGET CENTERED



As the signal grows stronger, the centered target indicator becomes clearer.

02 HOW TO USE PINPOINT

- 1 Find the target in a normal search mode, then move the coil to a spot where it no longer responds.
- 2 Press and hold **Confirm / Pinpoint** for **2 seconds**, then release the button.
- 3 Keep the search coil parallel to the ground and slowly approach the target.
- 4 Mark the point with the strongest audio signal and the clearest target indicator.
- 5 Turn **90 degrees** and repeat the sweep. Center points found from different directions help locate the target more accurately.

Note: Pinpoint mode does not provide metal discrimination or Target ID information. Its result is used only to locate the center of the target.

FREQUENCY SELECTION

Single-frequency and simultaneous multi-frequency options

01 CHANGING THE FREQUENCY

Frequency selection lets you adapt the detector response to target size, conductivity, ground conditions and environmental interference. There is no single best option for every search area; test the available frequencies in the field.

FREQUENCY SHIFT / NOISE CANCELLATION BUTTON

Press and release

Selects the next frequency option.

02 SINGLE-FREQUENCY OPTIONS

7 kHz

Strong response to large, highly conductive targets and depth-focused searching.

14 kHz

A balanced, general-purpose response across different target types.

22 kHz

Increased sensitivity to small targets and targets with lower conductivity.

36 kHz

High sensitivity to very small, thin and low-conductivity targets.

7 kHz — Large / highly conductive targets

— Small / low-conductivity targets 36 kHz

03 SIMULTANEOUS MULTI-FREQUENCY OPTIONS

MF 1

MF 2

MF 3

MF1, MF2 and MF3 are different simultaneous multi-frequency profiles that evaluate information from multiple frequency components together. Test the profiles and select the one that provides the most stable and suitable response for the ground, targets and interference conditions.

IRON REJECT

Quickly enable or disable the detection of iron-region targets

01 OVERVIEW

Iron Reject disables detection of targets classified in the iron ID region and prevents their audio response. This helps make searching more comfortable where iron debris is common. The function is not in the menu: it is controlled directly with its dedicated button on the control panel.

IRON REJECT BUTTON

Short press

On / Off

IRON REJECT

ON



Targets classified in the iron region are not detected and produce no audio response. Searches can be quieter in areas with heavy metal debris.

IRON REJECT

OFF



Iron targets are detected and produce an audio response like other metals. Turn rejection off to recheck an area or an uncertain signal.

02 WHEN TO USE IT

IRON-DEBRIS AREAS

Ground with many iron nails or similar scraps.

UNCERTAIN SIGNAL

Compare target responses with Iron Reject on and off.

RECHECK AN AREA

Switch rejection off to rescan while hearing all target responses.

Caution: Iron Reject does not guarantee that every iron target will be rejected in every situation. Large, rusty, irregular or differently oriented iron can register outside the iron ID region. Responses from valuable targets close to the iron range may also be affected. Sweep uncertain signals from different directions, then switch Iron Reject off and check again if needed.

NOISE CANCELLATION

Automatic channel scanning

01 OVERVIEW

Noise Cancellation helps reduce electromagnetic interference from power lines, electronic devices, transmitters or nearby detectors. The detector automatically scans the available channels, selects the most suitable one and continues searching on that channel.

FREQUENCY / NOISE CANCELLATION BUTTON

2 seconds

Hold, then release

02 HOW TO USE IT

1 Hold the search coil still at a spot away from metal targets.

2 Hold **Frequency / Noise Cancellation** for **2 seconds**, then release.

3 Keep the detector and search coil still until the automatic channel scan is complete.

4 The detector selects the most suitable channel automatically and stays on it. Resume your search.

03 AUTOMATIC CHANNEL SELECTION

SCAN

Available channels are checked.

MEASURE

Interference levels are compared.

SELECT

The best channel is selected.

SEARCH

The detector stays on that channel.

04 INTERFERENCE OR GROUND EFFECT?

EMI / ENVIRONMENTAL NOISE

Random sounds can occur even with the coil in the air.

GROUND EFFECT

If the response increases near the ground, check Ground Balance.

FIELD SIGNALS

Evaluating target responses in challenging ground

01 LARGE OR NEAR-SURFACE TARGETS

A target close to the surface or a very large target may produce several, changing or unusually broad responses. If you suspect such a target, raise the search coil slightly, slow your sweep and check the signal center again.

Try this: Raise the coil - slow the sweep - check again from different directions.

02 FALSE SIGNALS AND POSSIBLE CAUSES

The detector may respond as if a target were present even when there is no metal. Signals that do not repeat or disappear when swept from another direction can have several common causes:

GROUND

High mineralization

ROCK

Mineralized rocks or hot rocks

EMI

Environmental electromagnetic interference

TARGET

Rusty iron, foil or nearby metals

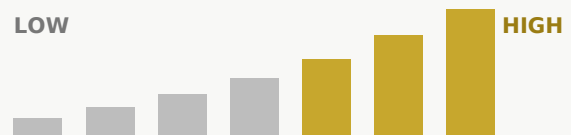
03 ROCKS AND ROCKY GROUND

Rocks with conductivity or magnetic properties unlike the surrounding soil can produce target-like audio and ID responses. Rocks that respond more strongly than the ground are called **positive rocks**; weaker responses are called **negative rocks**.

Rock and ground responses cannot be assessed reliably without proper Ground Balance. Check consistent, repeatable signals from several directions.

04 MAGNETIC MINERALIZATION

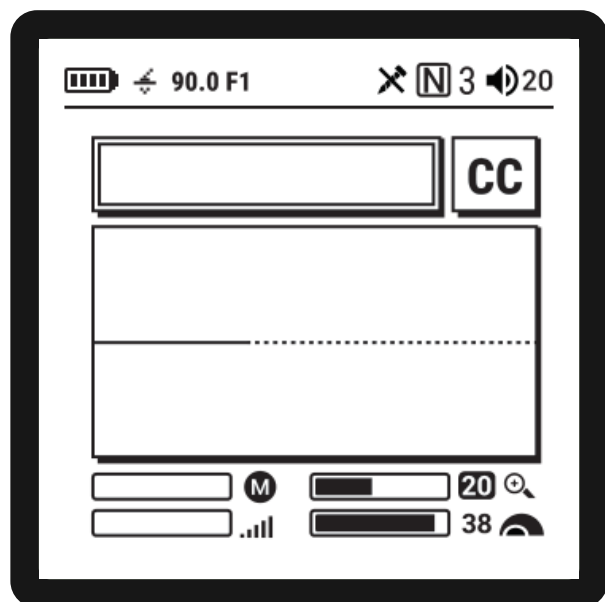
The mineralization indicator gives information about the magnetic content of the ground. Higher bars can mean a stronger ground effect, reduced detection depth and a greater chance of false signals.



If responses are unstable or seem false: First check Ground Balance and sensitivity. For environmental EMI, try a different operating frequency or run Noise Cancellation. If the problem remains, use Filter only at the level needed.

COIL WARNING (CC)

Checking the search-coil connection



WHAT DOES THE WARNING MEAN?

This warning indicates that the transmit signal from the search coil has been interrupted, or that the detector cannot detect the connected coil.

Common causes include a connector that is not fully seated, a loose connection, or damage to the cable or connector.

IMPORTANT

Turn the detector off before checking the connection. Do not force the connector or pull on the cable.

01 CHECKING SEQUENCE

1

POWER OFF

Switch the detector off completely before checking the connection.

2

CHECK CONNECTION

Unplug the connector and reseal it in the correct orientation. Secure it.

3

INSPECT CABLE

Check the cable, connector and pins for damage, dirt or moisture.

4

RESTART

After connecting the coil, switch the detector on and check the warning.

02 IF THE WARNING CONTINUES

Make sure the **Coil Type** selected in the menu matches the fitted search coil: **30 cm DD** or **35 cm DD**. If possible, test the detector with another compatible search coil. If the warning persists, contact authorized service; do not open or attempt to repair the coil or detector.

Do not use the detector with a damaged, wet or strained connector.

TECHNICAL SPECIFICATIONS

Aurix 900 / Professional metal detector

FEATURE	AURIX 900
Ground Balance	Automatic / Manual
Sound Type	PWM / Polyphonic
Target ID Accept / Reject	Yes
Discrimination	Gold / Steel / Valuable / Non-valuable / Mineral Bar / Void
Target ID	Yes
Text Discrimination Information	Yes
ICON Display	Yes
Dynamic Metal	Yes
Static	Yes
Vector	Yes
Pinpoint	Yes
Search Modes	Field / Park / Beach / All Metals
Brightness	Adjustable
Auto Brightness	Yes
Filter	2 levels
Noise Cancellation	Automatic channel scan
Bluetooth	Optional, separately purchased module
Frequency	7 / 14 / 22 / 36 kHz / MF1 / MF2 / MF3
Language	Turkish / English
Sensitivity	44 levels
Signal Strength Indicator	Yes
Vibration	Yes
Threshold	5 levels
Recovery Speed	Adjustable 10 - 80
Tone Break	Yes
Depth Calculation	Yes
Search Coils	30 cm DD / 35 cm DD

NOTE

FX Technology reserves the right to change product specifications, design and accessories without prior notice.



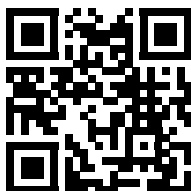
USER MANUAL / ENGLISH

MANUFACTURER



AURIX 900

PROFESSIONAL METAL DETECTOR



PRODUCT AND SUPPORT INFORMATION

www.fxmetaldetectors.com

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