



GER DETECT



UG GROUND scanner



INDEX

- **Section 1:**
Critical Warning
- **Section 2:**
Overview
- **Section 3:**
Definition of the main unit buttons & leds
- **Section 4:**
The device features and specifications
- **Section 5:**
UIG GROUND SCANNER parts assembly
- **Section 6:**
UIG GROUND SCANNER device operation steps
- **Section 7:**
The device parts and accessories
- **Section 8:**
The technical specifications

Critical Warning

- Please be sure that all precautions are taken against risks.
- Do not use your device while it is raining.
- Turn on the device after you make sure that all parts are in place and connected.
- Make sure that the device battery is fully charged before you start searching.
- When the battery will almost die the device will turn off automatically.
- If the indicator on the battery starts flashing, and giving beep sound turn off the device and recharge the battery.
- It is recommended to read the user manual before starting on the device to understand everything and to avoid mistakes through the search.
- Be aware of (energy sources - phone network - metals - mobile phones - electronic devices), and do not use any charger other than the original one.
- The device main unit is under two (2) years warranty against all electronic breakdowns, any damages caused by user errors (falls, opening the main unit, hits, harms etc.) are not covered within this warranty.
- Battery charger and the tablet don't cover by the warranty.
- You should strictly follow the instructions in this user manual to minimize faults and to use your device correctly.
- If the device is not used correctly, or there is a high source of noise, in these cases the device will not be capable to confirm the target accurately

We wish you all the best of luck in your search.....

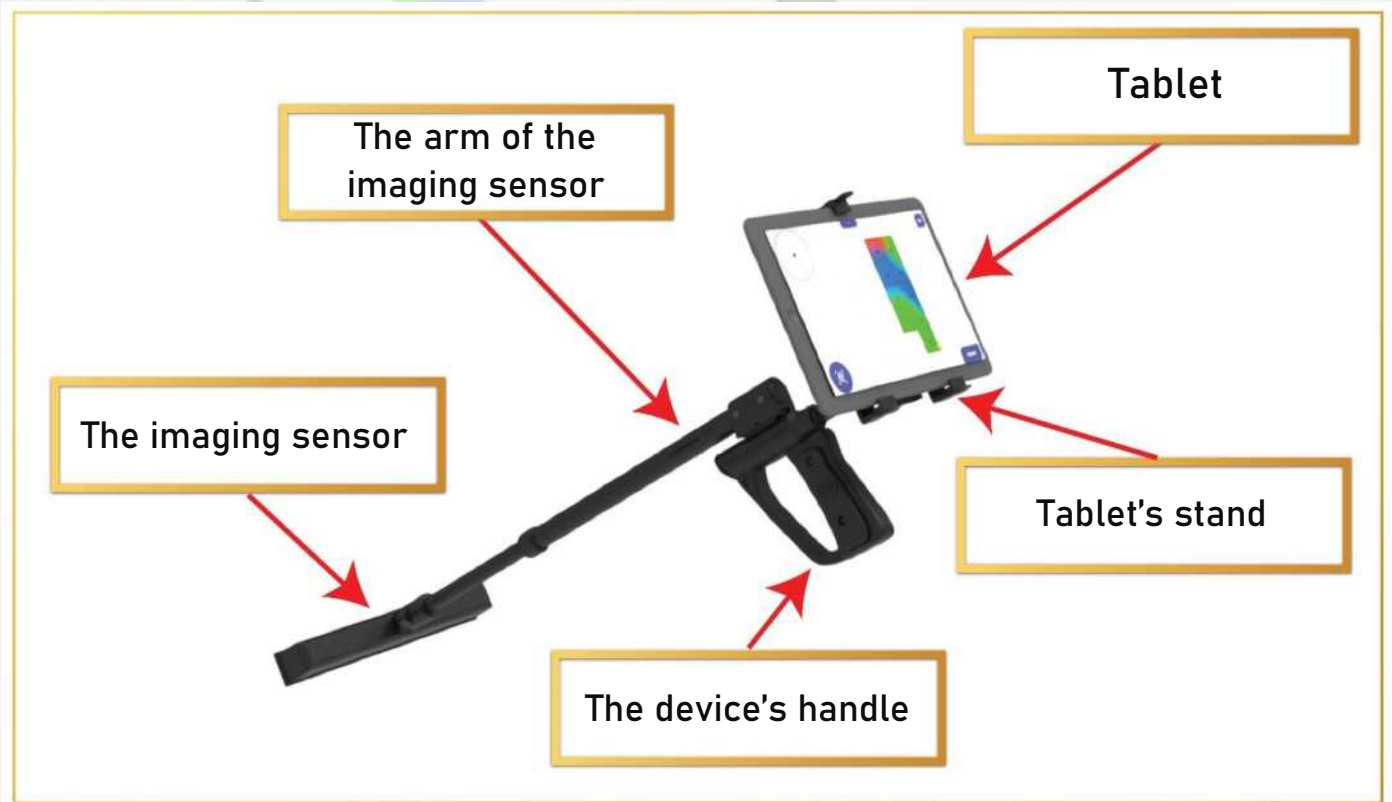
(Overview)

Dear our client,

“Thank you for choosing UIG GROUND SCANNER”

- ✓ It has completely developed the device into a UIG GROUND SCANNER device with the addition of more systems and the development of the device's characteristics with new professional techniques in capturing targets with high accuracy and determining the depth in an easier and more accurate way.
- ✓ UIG GROUND SCANNER is the first device of its kind in the world that functions with three professional scanning and imaging techniques with a multi-tasking imaging sensor with modern and highly effective techniques supported by a lightweight moving arm to facilitate the scanning and imaging of targets.
- ✓ Searching for metals, treasures, archaeological burials, trails, tunnels, caves and voids underground.
- ✓ The depth of the search in the UIG GROUND SCANNER in the 3D system reaches 30 meters in the ground
- ✓ The device works in six languages: English - Arabic - Spanish - French - German - Portuguese.
- ✓ The UIG GROUND SCANNER device is one of the best German manufactures. It has the European CE certificate according to international specifications, in addition to the international ISO 9001 certificate according to international specifications and standards.
- ✓ This device is designed to be compatible with its functioning in all countries and regions.

Definition of the main unit buttons & leds



The device features and specifications

The UIG GROUND SCANNER device has multiple features to search for gold, buried treasures, precious metals and diamonds in the ground:

- Three professional scanning and imaging techniques with a multi-tasking imaging sensor.
- Super speed in capturing targets and locating them accurately.
- Determining the target depth easily and accurately.
- The ability of distinguishing metals and voids with two different sounds.
- A lightweight moving arm to facilitate the scanning and imaging of targets.

UIG GROUND SCANNER device parts connection

1



Install the imaging sensor
on the holder arm

2



Install the handle on the arm

3



Install the tablet base



Install the tablet on its own base



Extend the arm by releasing the lock in the middle

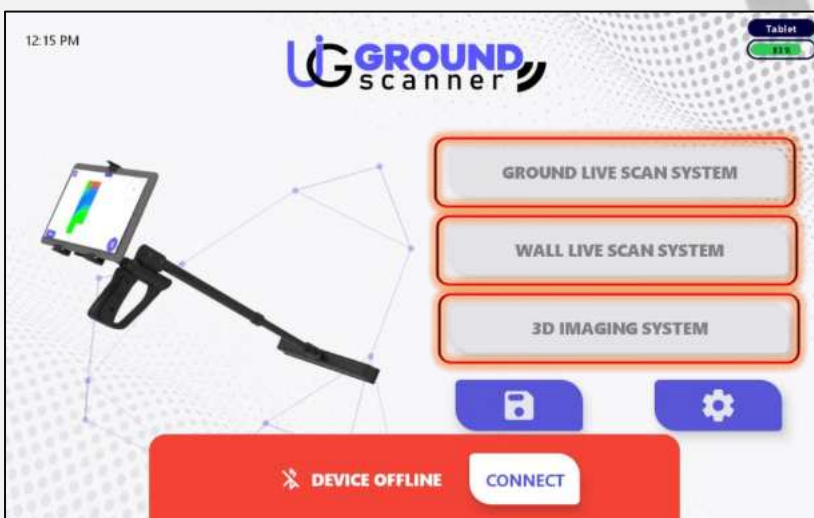


Plug the battery into the socket on the arm

UG GROUND SCANNER device operation steps



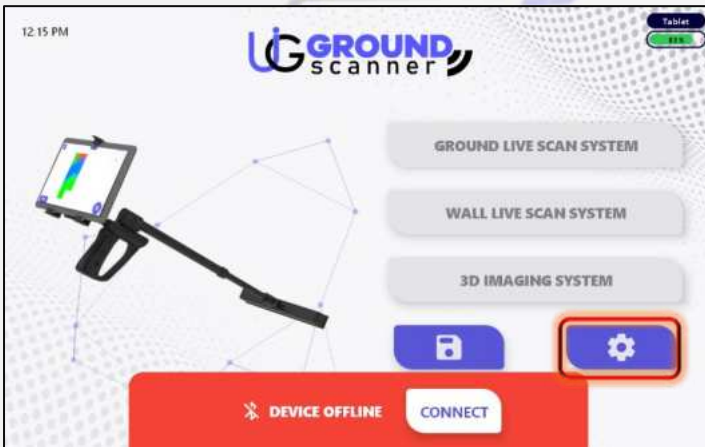
Launch the Ground Scanner application



The following icons will appear within the application:

Search systems:

- Ground live scan system
- Wall live scan system
- 3D imaging system



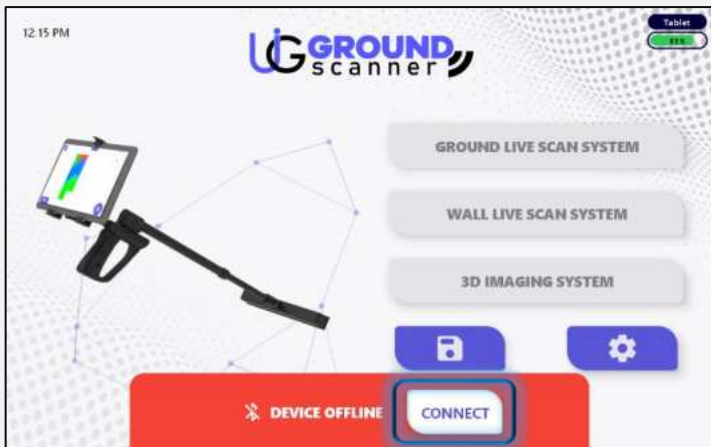
Settings icon which contains:

- A list of several languages supported by the application: (English - Arabic - Spanish - French - German - Portuguese)
- Sound icon: to mute and activate the sound.
- Vibration icon: to activate and cancel the vibration.
- (Capture) Imaging button icon: to move the location of the imaging button from right to left or vice versa in the 3D imaging system.

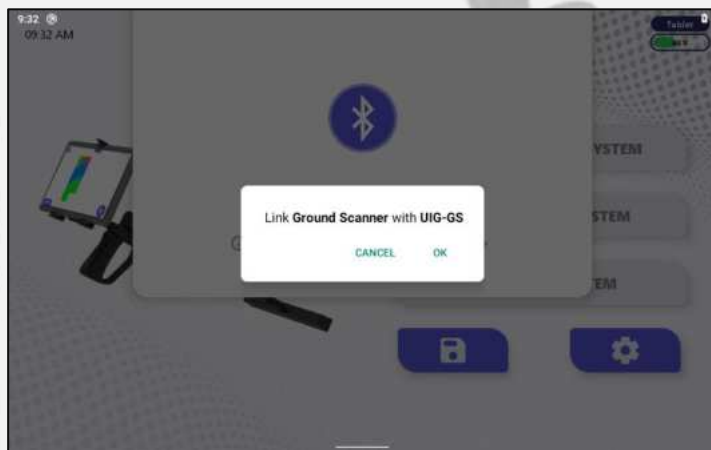


Saved results icon: to launch search operations and results that were previously scanned using the 3D imaging system and also contains three examples that were previously imaged

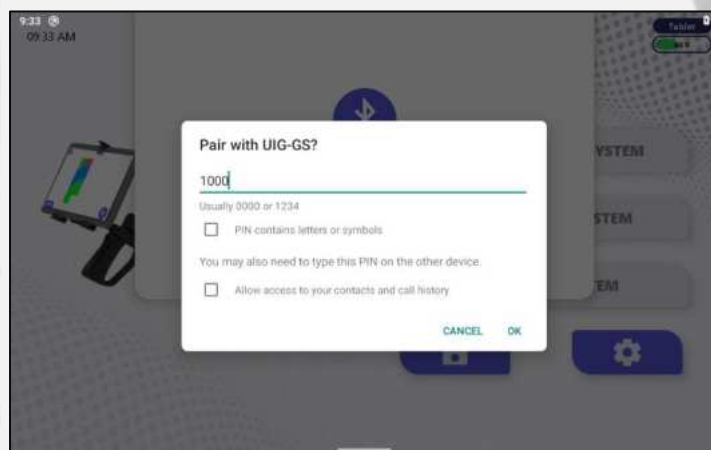




Connection icon: to establish a Bluetooth connection between the tablet and the imaging sensor.



Tap the connection icon to set up pairing between the tablet and the imaging sensor.



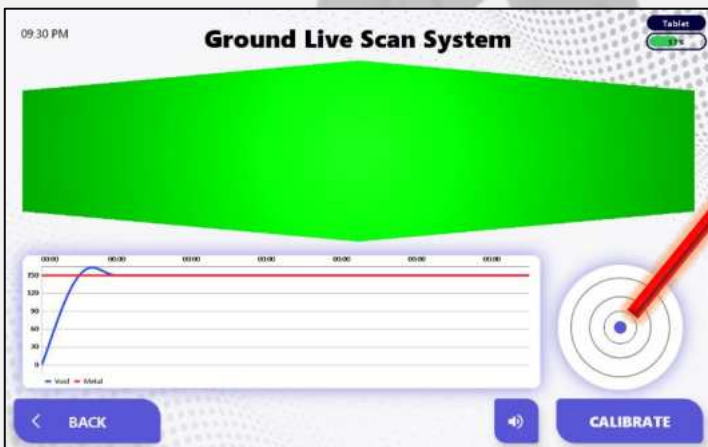
Note: When establishing a connection for the first time, a window will appear to enter the password, which is the number 1000.

Ground live scan system

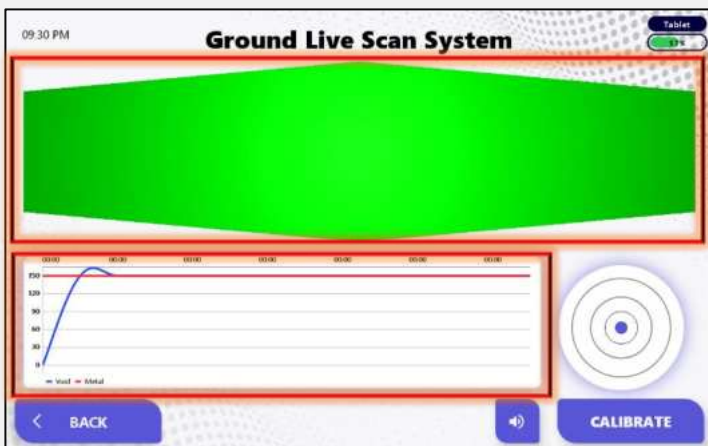


When you start using the live land scan system, a short video will appear simulating how to scan using this system.

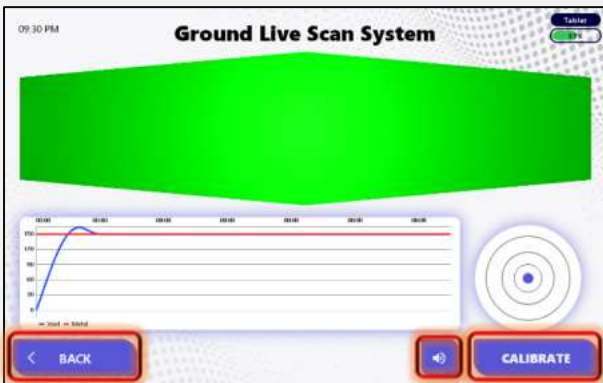
Click on the Start icon and wait for the calibration process to finish automatically.



Note: The balance of the device must be maintained during the search by installing the blue dot in the middle of the circle icon.



When the scanning process begins, an area appears in green and a chart representing the level of the signal strength emanating from the target with an intermittent sound indicating the start of the search process



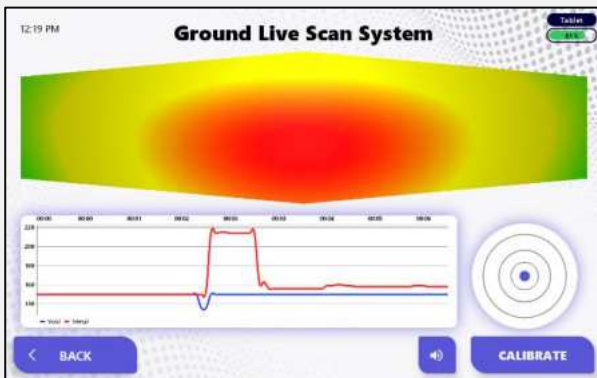
Calibration: To re-calibrate the device in case of switching to a different soil type during the search process.

Mute and activate the device's sound.

Back: To return to the main menu.



Walk to start the land scan process

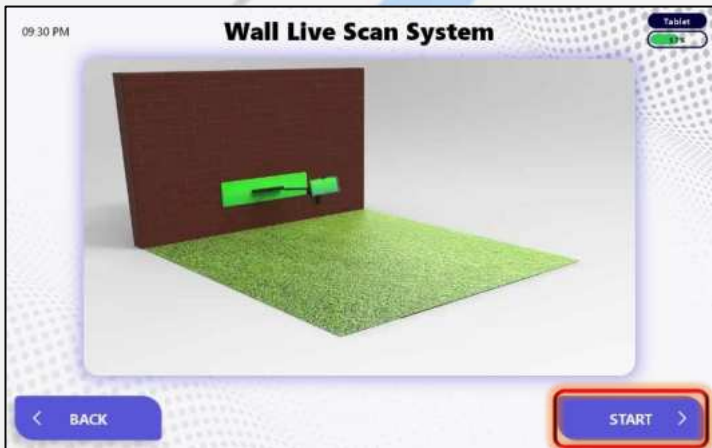


- When the device detects a metal target, the area turns from green to red gradient and the red indicator rises in the chart with a sound indicating the presence of **metal**.



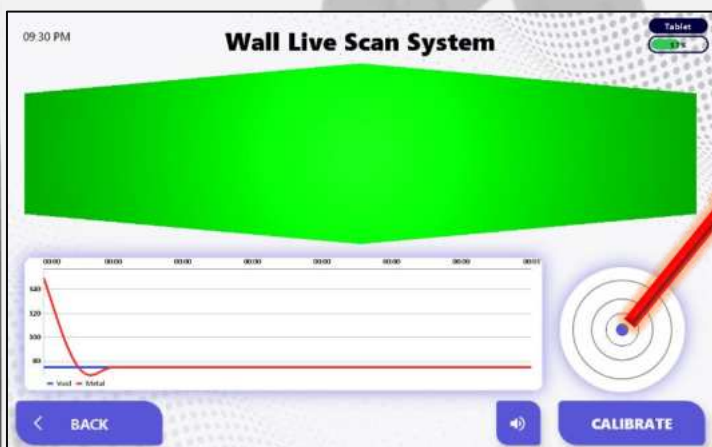
- When the device detects a void, the area turns from green to blue gradient and the blue indicator decreases in the graph with a sound indicating the presence of **void**.

Wall live scan system

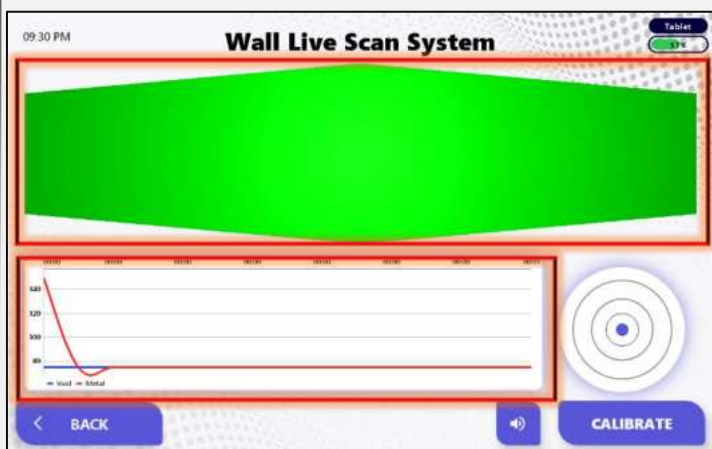


When you start using the live wall scanning system, a short video will appear simulating how to scan with this system.

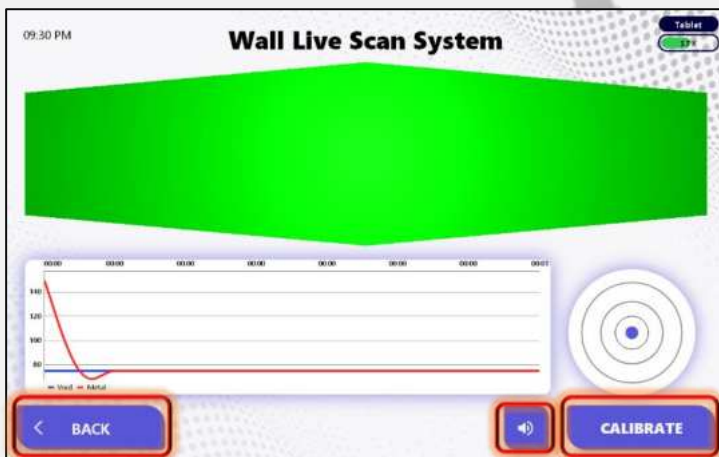
Click on the Start icon and wait for the calibration process to finish automatically.



Note: The device's balance must be maintained during the search by fixing the blue dot in the center of the circle icon.



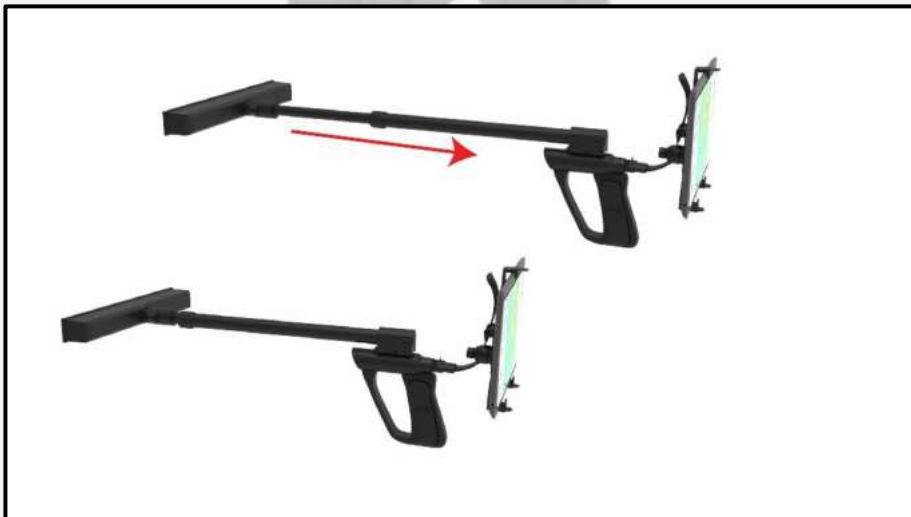
When the scanning process begins, an area appears in green and a chart representing the level of the signal strength emanating from the target with an intermittent sound indicating the start of the search process.



Calibration: To re-calibrate the device, move to a different type of wall or change the scanning direction during the search process

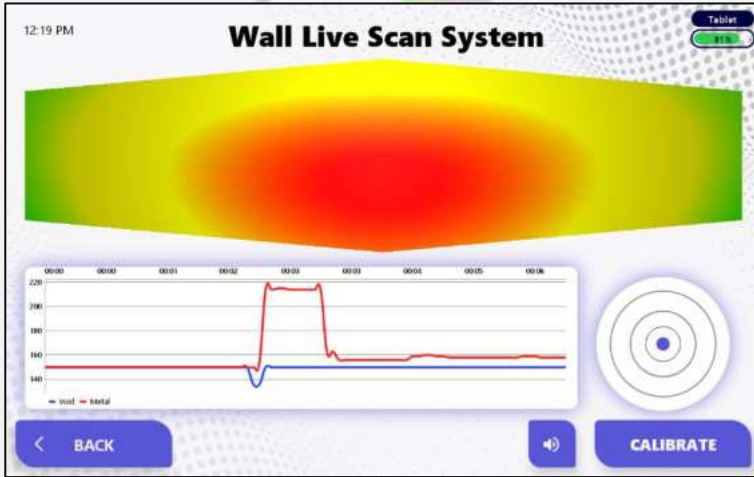
Mute and activate the device's sound.

Back: To return to the main menu.

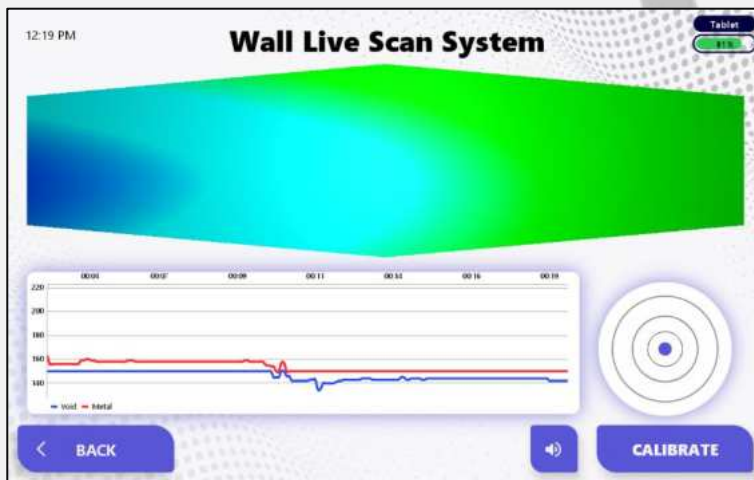


Shorten the arm's length and start the wall sweep.



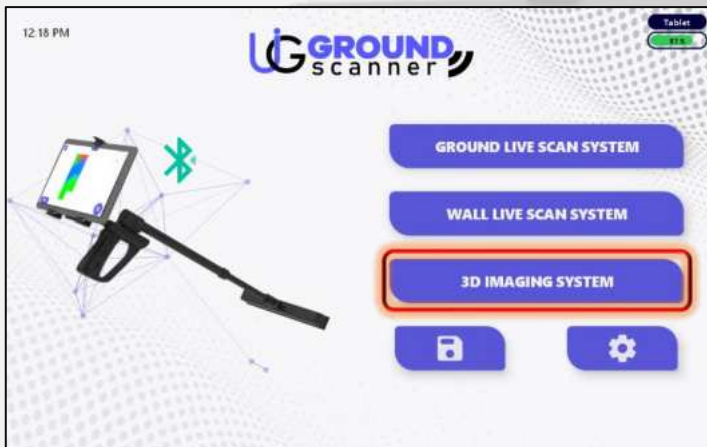


- When the device detects a metal target, the area turns from a green to red gradient and the height of the red indicator in the chart with a sound indicating the presence of **metal**.



- When the device detects a void, the area turns from green to blue gradient, and the blue indicator decreases in the graph with a sound indicating the presence of **void**.

3D imaging system



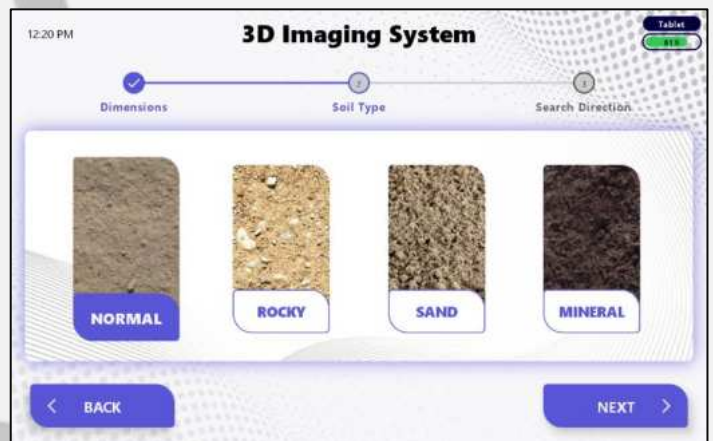
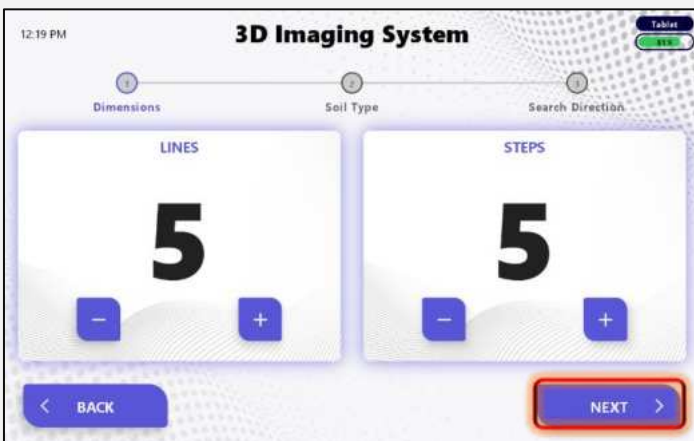
- Choose the 3D imaging system, a screen will appear containing:

A number of columns: It is to specify the number of vertical lines to be searched within.

(The minimum possible number is 3 columns; the maximum possible number is 12 columns).

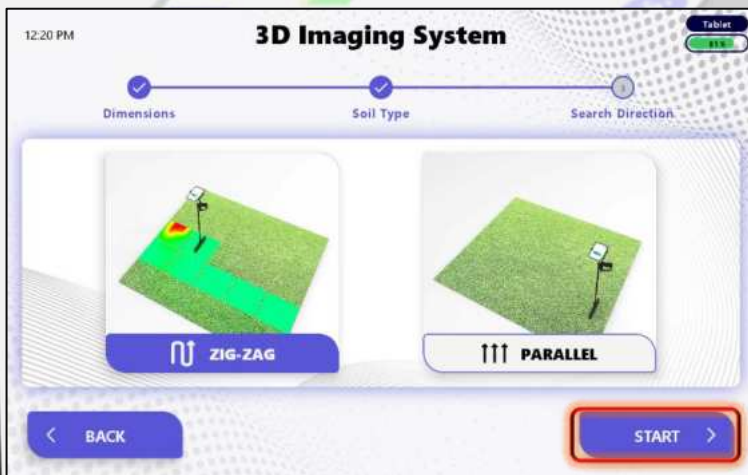
The number of steps: It is to specify the number of images or steps within a single column.

(The minimum possible number is 3 steps; the maximum possible number is 12 steps).



- After you have finished specifying the number of columns and steps, press the Next button to go to the soil type selection screen, which is:

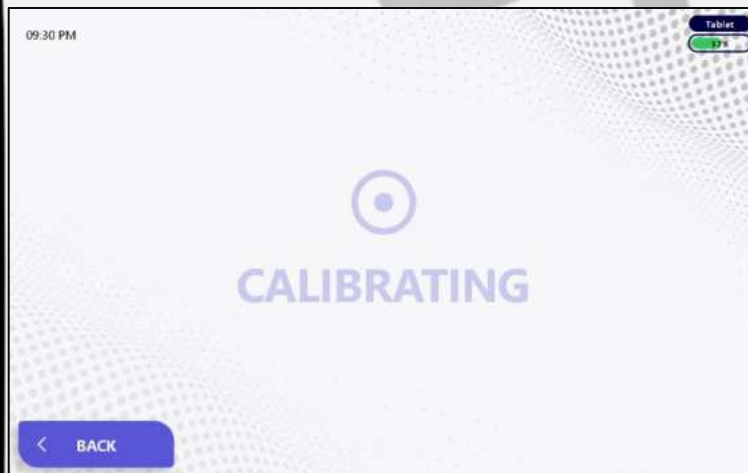
Mineral - sandy - rocky - Normal.

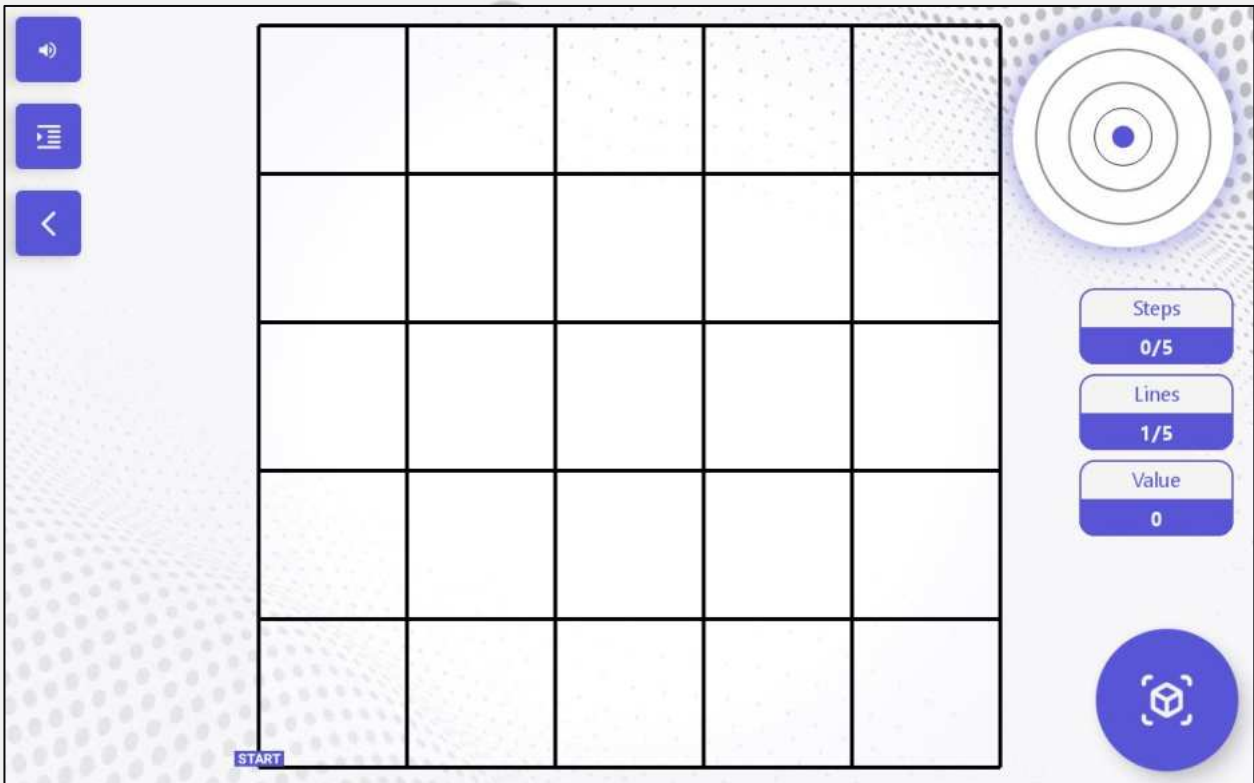


- After selecting the soil type and pressing the Next button, a screen will appear to choose the scanning direction:

Either scanning in a parallel direction or wipe in a zigzag direction, that is, in opposite directions, back and forth.

Choose the scanning method, then click on the Start icon and wait for the calibration process to finish automatically.





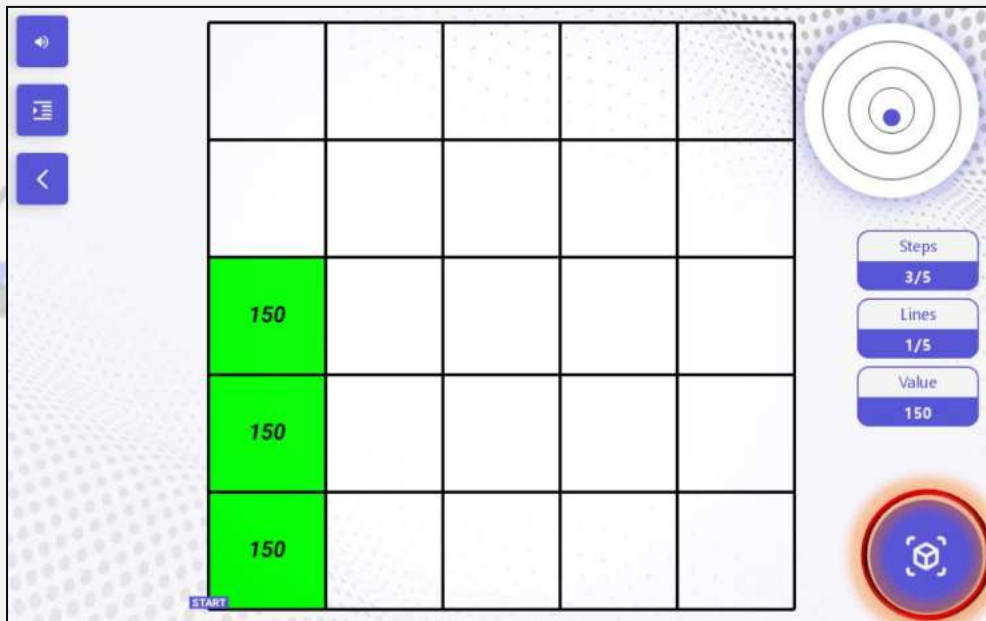
The search screen will appear, which contains:

- Mute and activate the sound icon.
- Hide and show the spreadsheet.
- Back to the main menu icon.

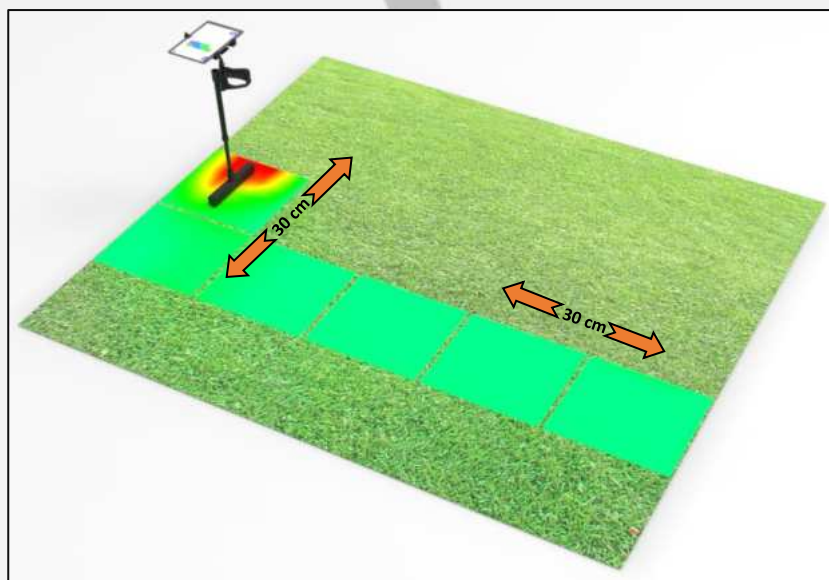
A spreadsheet containing:

Number of Steps Captured - Number of Columns Scanned - Value:
which denotes the value of each captured image.

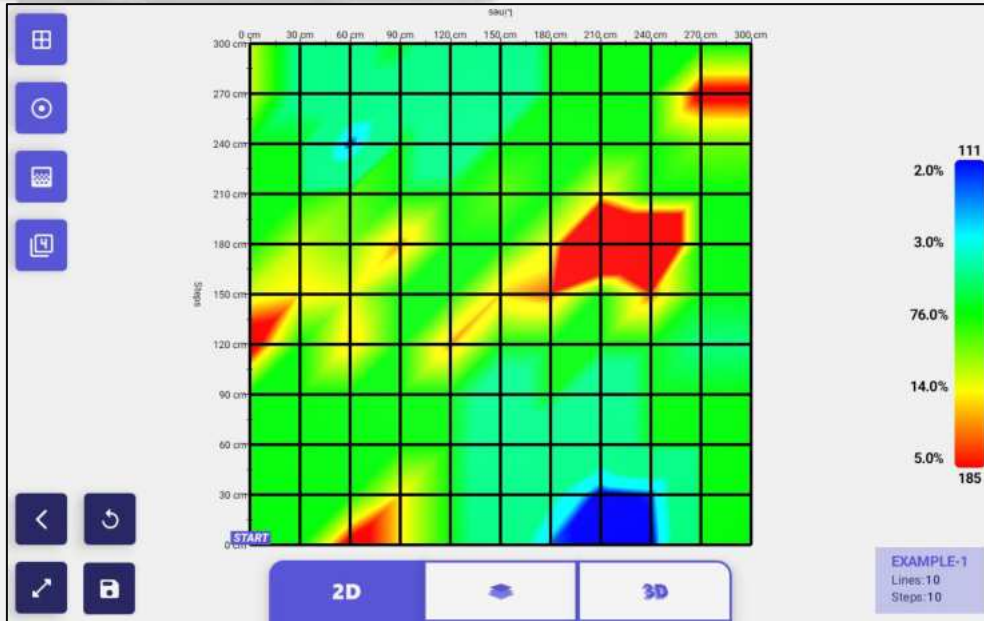
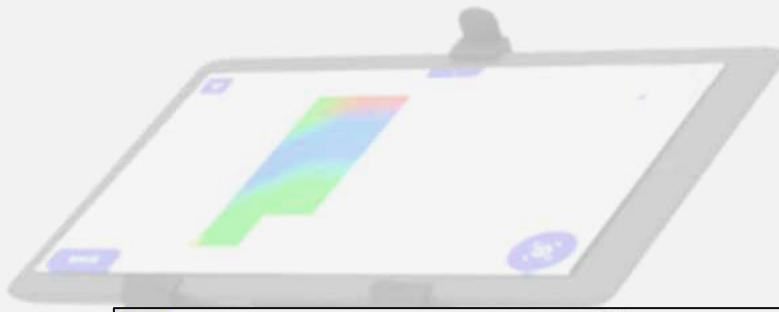
- Taking photo button.



Start the scanning process by pressing the photo button on the grip of the device or pressing the photo button on the tablet screen.



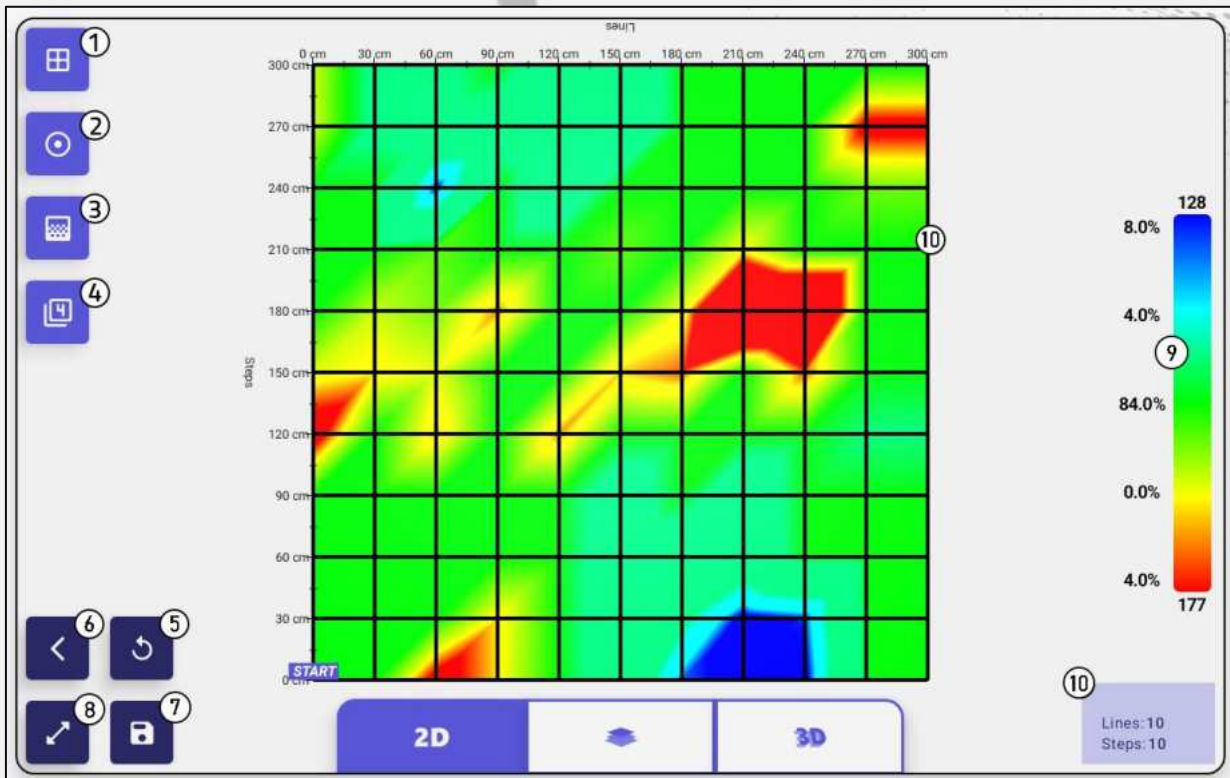
Take a step not exceeding 30 cm, then walk, and follow the same steps until the completion of the photography process. The distance between the lines also must be 30 cm.



After finishing the shooting process, an image of the target being photographed will appear on the screen of the tablet.

Where the image is composed of a grid of squares, which expresses the number of steps and columns that have been scanned.

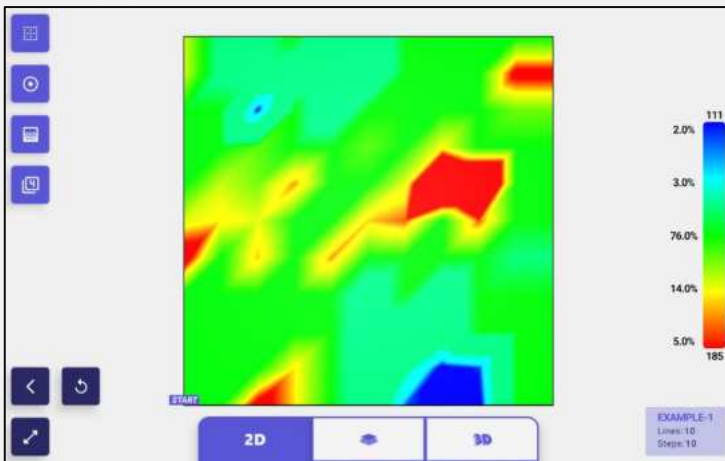
2D Option



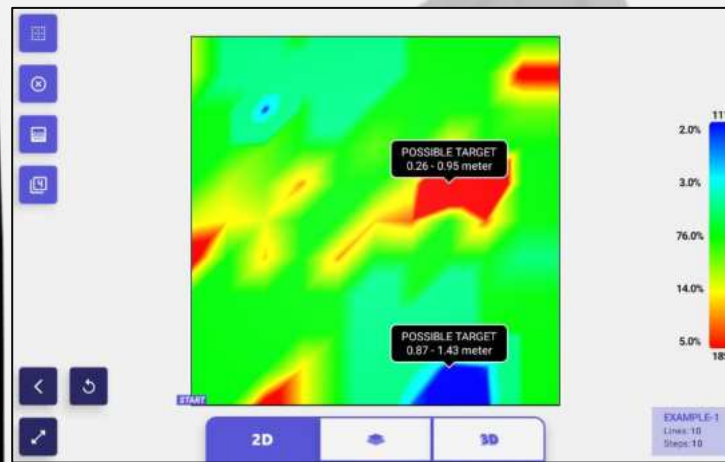
2D View:

Show the final result in the form of a 2D image with several icons for analyzing the image:

- 1- Icon to show and hide the borders of the image, which are in the form of squares.
- 2- Depth icon for potential targets (this icon appears only when there are confirmed targets and disappears when there is no target).
- 3- Hue control icon: Increase or decrease the hue of the image.
- 4- Search values icon: to show or hide the target values in the image.
(The values appear only when there are confirmed targets and disappear when there are no targets).
- 5- Icon to restore the image to the default form.
- 6- Back to the home page icon.
- 7- Search result storage icon.
- 8- Zoom icon to fill the screen.
- 9- A percentage chart of the colors in the image.
- 10- An icon to show the number of Lines and Steps.



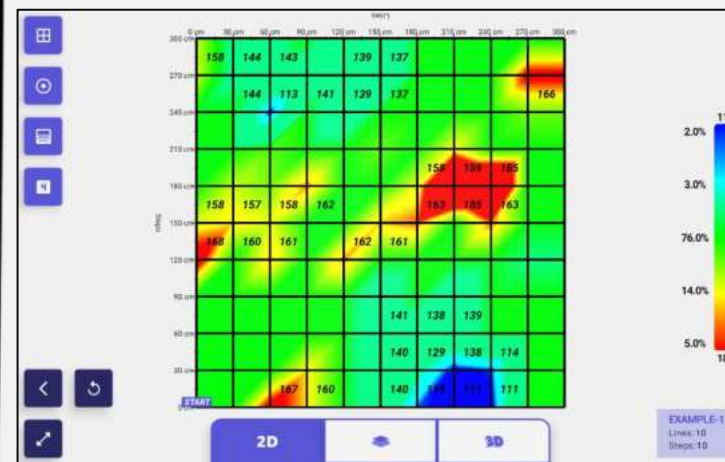
1- Icon to show and hide the borders of the image, which are in the form of squares.



2- Depth icon for potential targets (this icon appears only when there are confirmed targets and disappears when there is no target).
If there are two targets of metal in the same picture, the depth will appear for the stronger target only.

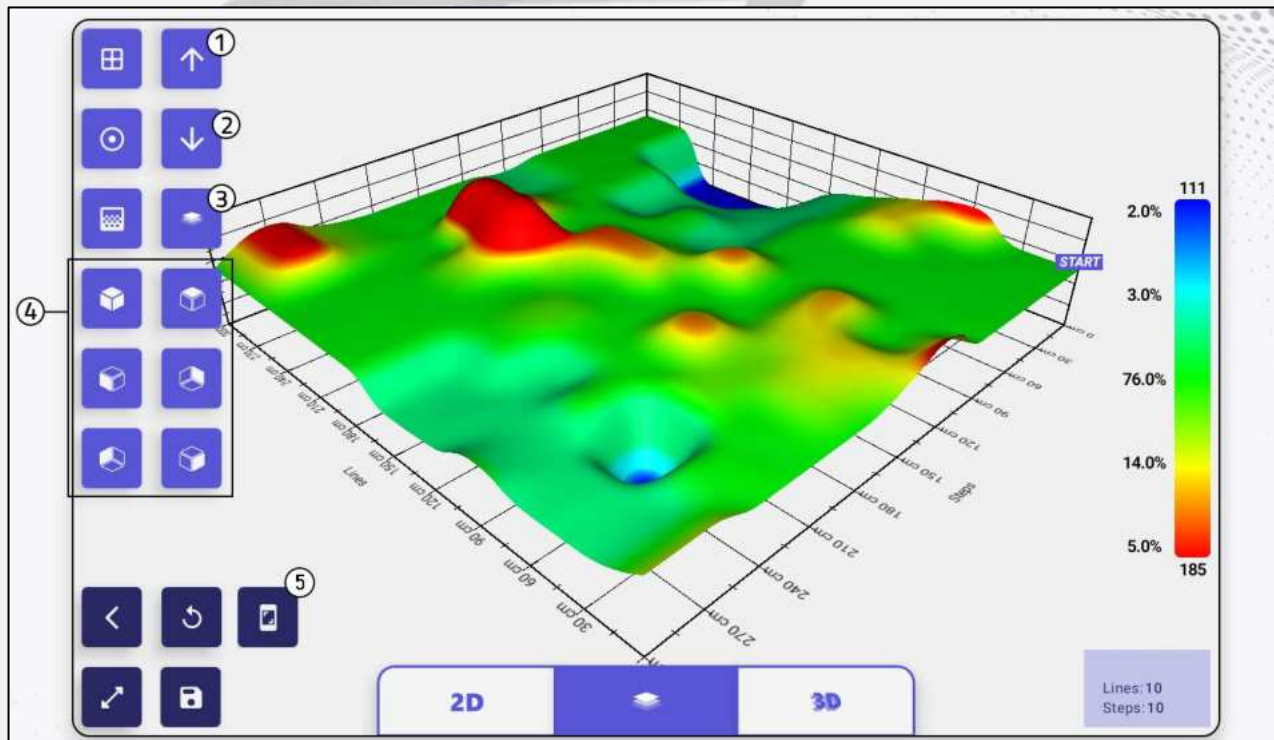
Note: If there are two voids' targets or two metals' targets in the same picture, the depth will appear for the stronger target only also.

It is recommended to repeat the scanning process in the case of several targets appearing in the same picture and to rescan each target separately by reducing the number of steps and lines to fit the target area.



4- Search values icon: to show or hide the target values in the image

Layers display option

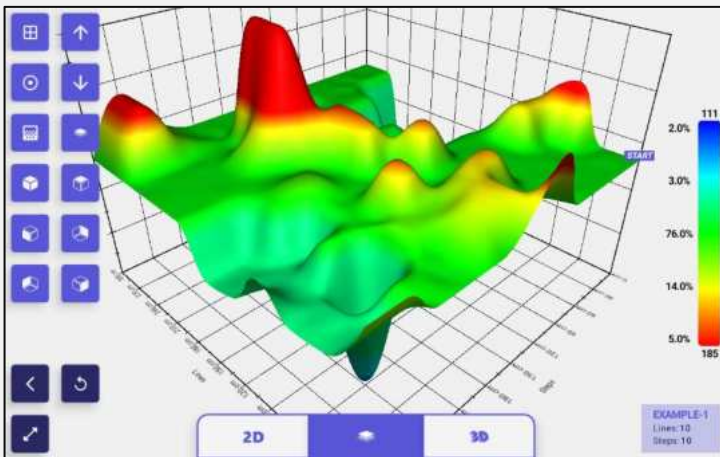


Layers display option:

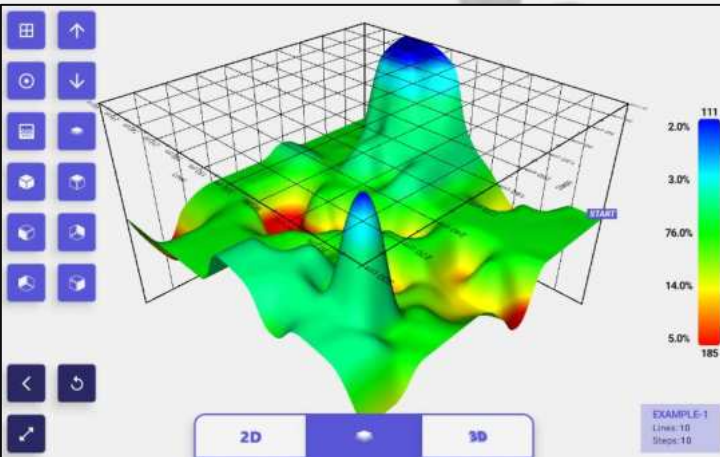
Show the final result in a three-dimensional image consisting of layers (a layer indicating the presence of minerals - a layer indicating the presence of voids - a layer indicating soil - a layer showing salts).

It also contains several icons that help analyze the result:

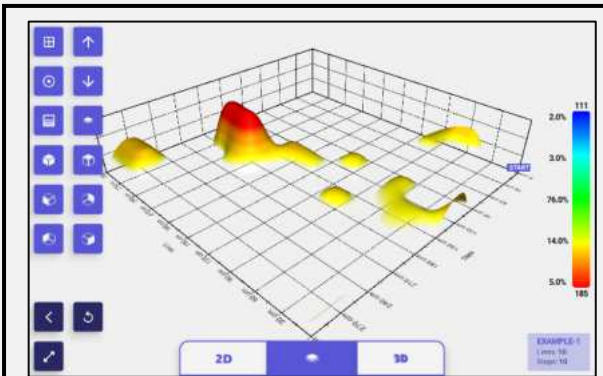
- 1- Increasing the distance of the height of the layers: to increase the clarity of the sizes of small targets.
- 2- Reducing the height distance of layers: to reduce the height of large target sizes.
- 3- Switch between layers: separate the metal layer from the void layer and show them separately.
- 4- Rotation control: It consists of six icons to change the image's perspective in six different directions.
- 5- Icon to save the resulting image in PNG format.



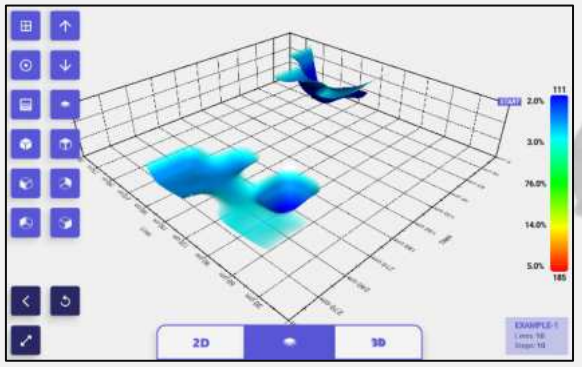
1- **Increasing** the distance of the height of the layers: to increase the clarity of the sizes of small targets.



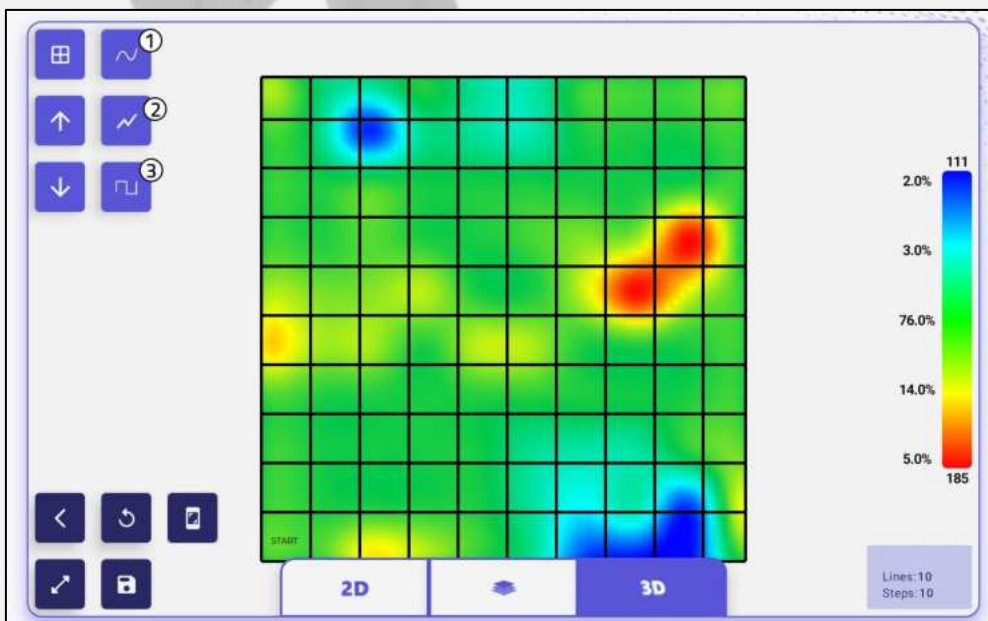
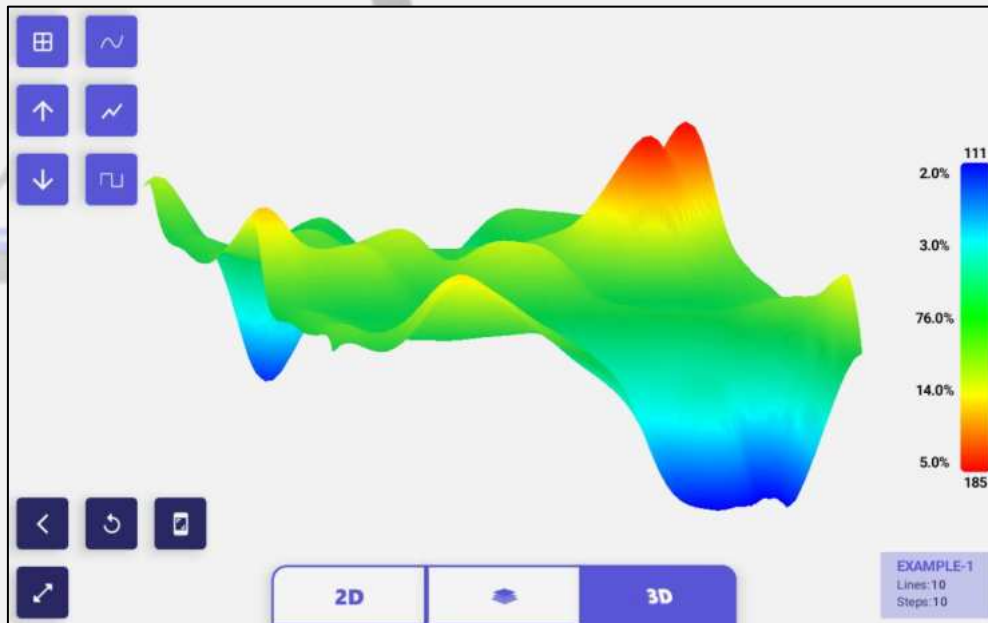
2- **Reducing** the height distance of layers: to reduce the height of large target sizes.



3- **Switch** between layers: separate the metal layer from the void layer and show them separately.



3D option



3D View:

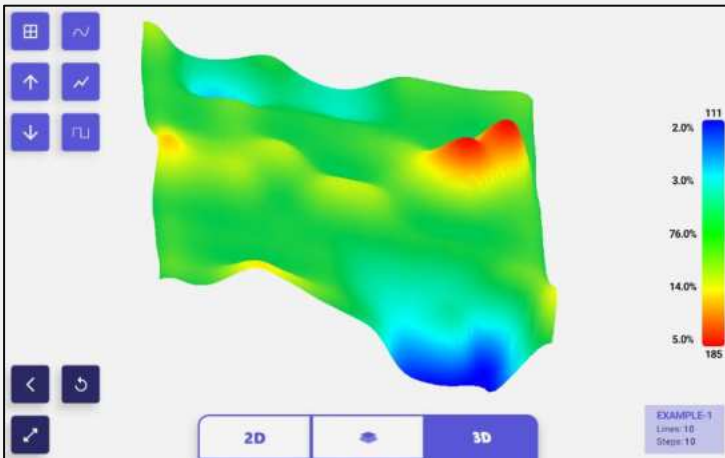
Show the final result in the form of a 3D image with several icons to control the image:

1- Streamlined gradient: to show a streamlined color gradation of the targets.

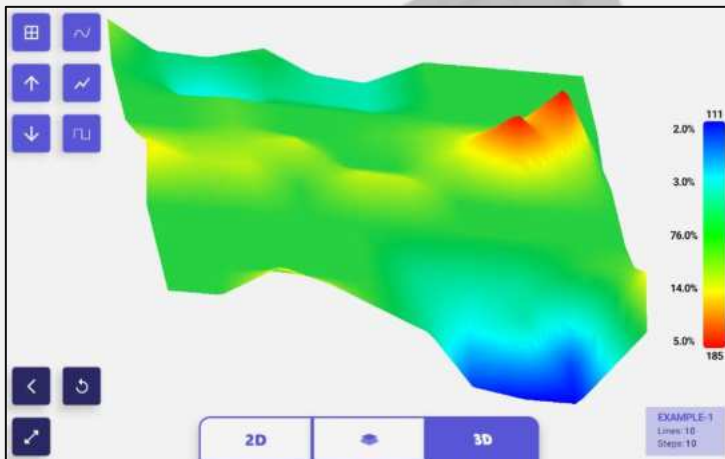
2- Sharp Gradient: To show a sharp color gradation of the targets.

3- Cubic gradient: to show the color gradation of the targets in a geometric way.

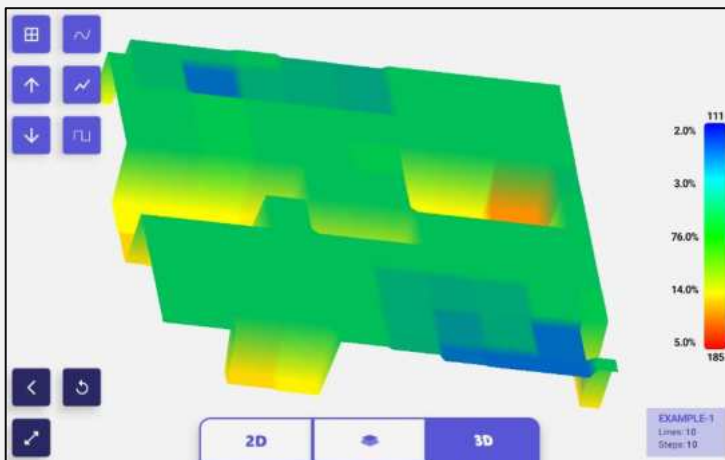
(These icons are used to control the recognition of the image in order to be closer to the shape of the target in reality).



1- Streamlined gradient: to show a streamlined color gradation of the targets.



2- Sharp Gradient: To show a sharp color gradation of the targets.



3- Cubic gradient: to show the color gradation of the targets in a geometric way.
(These icons are used to control the recognition of the image in order to be closer to the shape of the target in reality).

The device parts and accessories

| | |
|--|---|
| | <p>A Carrying bag for the device protection</p> |
| | <p>Tablet</p> |
| | <p>Tablet's stand</p> |
| | <p>The arm of the imaging sensor</p> |
| | <p>Imaging sensor</p> |
| | <p>Device's handle</p> |
| | <p>2500 mAh battery</p> |
| | <p>Battery charger</p> |
| | <p>Car charger</p> |

The technical specifications

| UG Ground scanner Technical Specifications | |
|--|---|
| Dimensions | Device without sensor (Closed) 575 mm |
| | Device with sensor (Closed) 600 mm |
| | Device with sensor (opened) 880 mm |
| Bluetooth | 2.4 GHz Radio |
| Data processing speed | 72 MHz |
| Operating Temperature Range | 0 C° to 70 C° |
| Operating Humidity Range | Up to 95 % non-condensing |
| Storage Temperature Range | - 20C° to 70C° |
| Storage Humidity Range | Up to 98 % Relative Humidity |
| Operating Time (27 Wh Battery) | 10 Hours |
| Waterproof Rating - Detector | Not waterproof (weatherproof only) |
| BT144 Battery Technical Specifications | |
| Type | Rechargeable Battery - External Battery |
| Output Voltage | Li-ion 10.8 VDC |
| Capacity | Li-ion 27 Wh |
| Run Time | 10 Hours |
| Battery Operating Temperature | 0 C° to 50 C° |
| Battery Storage Temperature | - 5C° to 70C° |
| Battery Charger Technical Specifications | |
| Operating Temperature | 0 C° to 50 C° |
| Storage Temperature | - 30 C° to 80 C° |
| Input Voltage | 90 → 250 VAC 50→60 Hz |
| USB Output Current | 5 VDC / 2100 mA |
| Other Technical Specifications | |
| Total weight | 3900 g |
| Device weight | 1100 g |
| Battery weight | 330 g |
| Bag weight (empty) | 2230 g |
| Bag dimensions | 635 mm x 335 mm x 145 mm |