WATER LINE

1200M
DEPTH

3000M
DISTANCE

3 TYPE
OF WATER

USER MANUAL

Hergestellt in Deutschland

water line

detect all types of groundwater

GEOGROUND

GEOPHYSICAL GROUND MEASURING

www.Geo-Ground.com

Contents

Property rights	1	Settings	28
Introduction	2	Wireless handle charging	33
Package Contents	3	Technical specifications	35
Device installation	6	Warnings	37
Overview	10		
keyboard	11		
Turn on the device	12		
Main screen	13		
Water detect	15		
Adjust the ground balance	21		
Search method	22		

Property rights

Introducing the Water Line WL-9003 from Geoground..
This device is designed, programmed and produced exclusively in theg eophysical group “Geoground”. All innovations, designs and calculation algorithms available in this device are exclusive to this company and any copying ori mitation of these technologies requires a legal license from Geoground.

Geoground is not responsible for any use of its products in violation of the laws of the country in which these devices are used, nor is the company responsible for any kind of damage resulting from the wrong use of the device or misunderstanding of this usage guide.

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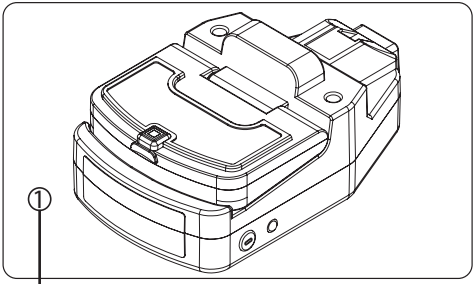
Starting from the light of the idea, passing through the entire planning stages, and ending with the completion of implementation and presentation.. Our company “Geoground” seeks continuously and accurately to develop and modernize these stages and their fields in the detection of various precious metals and treasures since its establishment nearly 20 years ago.

We always look forward to the distant horizon and the near future, and we confidently and steadily take all necessary steps to provide the best modern technologies and high-quality equipment, in order to help all our customers who are eager to reveal their treasures hidden in the ground.

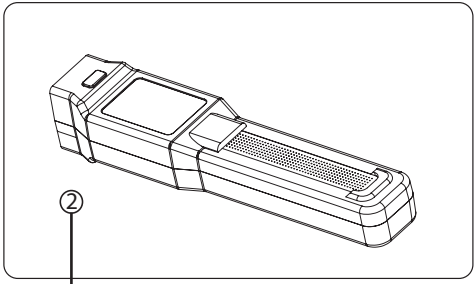
With a full team of experts, we always strive to manufacture and provide the best materials for our devices and design new generations of electronic boards and controllers, to suit all users, with a lot of features and technologies with each new launch of Geoground devices.

We work in Geoground factories with high accuracy, all stages of designing and manufacturing the pieces we offer, through the entire production stage, ending with the last audited presentation and production, to ensure high performance and accuracy in the results while searching for your hidden treasure.

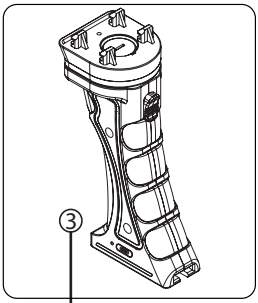
Package contents



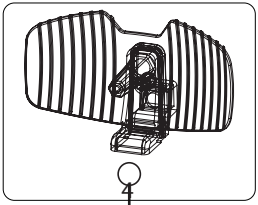
Main unit



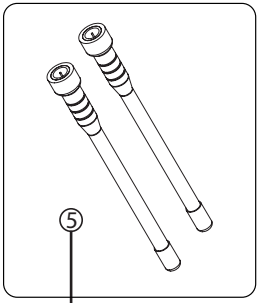
Smart sensor



Wireless handle

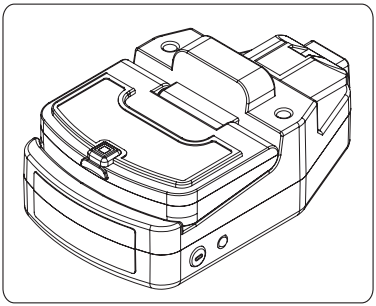


Signal booster dish



Search antennas

① Main unit: Or the main control unit of the Water Line device. The main unit from Geoground comes with a contemporary and modern design, and is easy to store and carry. The basic materials of the device are also designed with high craftsmanship and endless precision in order to adapt to the longest time and various uses in all search environments.

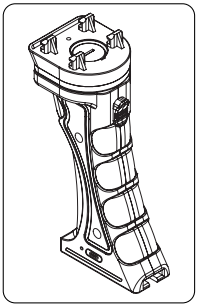


② Smart sensor: This unit is sensitive to undergroundwater. When we set up the device and start searching using the WATER DETECT system in which we use the smart sensor unit, we will see that the sensor light in the upper part of the unit starts to shine in harmony with the search results captured by the device. Geoground has developed modern technologies in the smart sensor unit, enabling the user to use it in most environments and uses, effectively and powerfully.

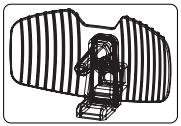
normal search

presence of water

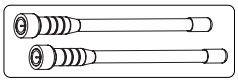
③ Wireless handle: However, this handle that holds the device is completely wireless, the company has developed several advantages in it, a search that fits all the necessary uses with the device. It started with the rotation feature that allows the device to rotate freely and smoothly around its axis towards the targets captured by the device, and passed through other features such as the continuous press button, the start selector, the rotation lock button, the easy and quick installation and removal button, and ending with the charging feature via the new Type-C port.

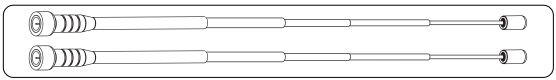


④Signal Booster Dish: This unit is one of the new and distinctive additions to the device. The dish enhances and filters all signals received by the device, in order to translate them into data that the device's technologies can understand.



⑤ Search antennas: or the antennas responsible for receiving or transmitting the basic signals of the device. With the advantage of opening the antennas until they take their full length, the company has worked here to enhance the strength and reach of these antennas to the largest possible search area.

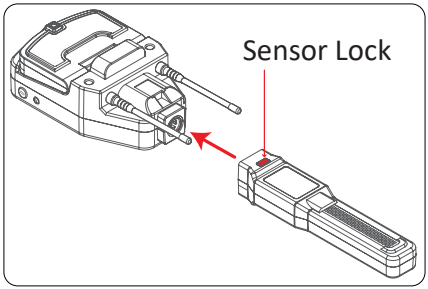




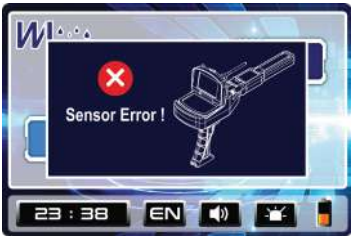
Device installation:

1- Install the smart sensor in the device correctly.

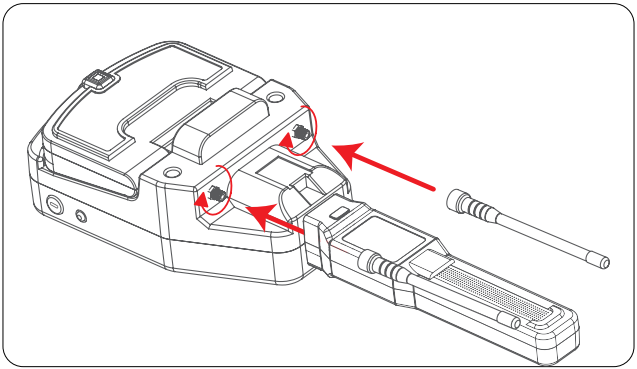
Attention
The sensor lock button should be on the top side of the main unit.

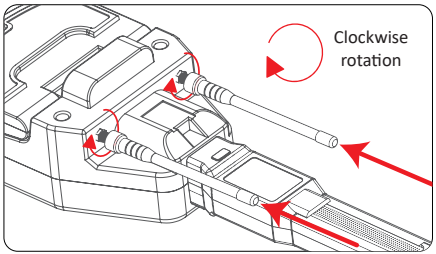


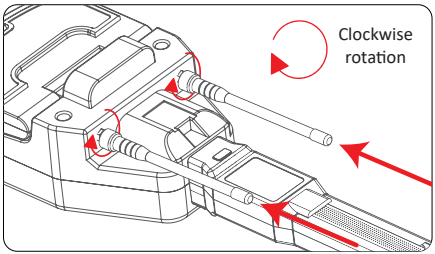
If a smart sensor is not installed on the device, in systems that use the sensor, a sensor error message will be displayed on the systems screens. Install the smart sensor correctly, you will notice that the error message has disappeared, and you can then continue working.



2- Install the search antennas on the device as shown on the side. Then twist the antennas clockwise until they lock into the location indicated on the main unit.

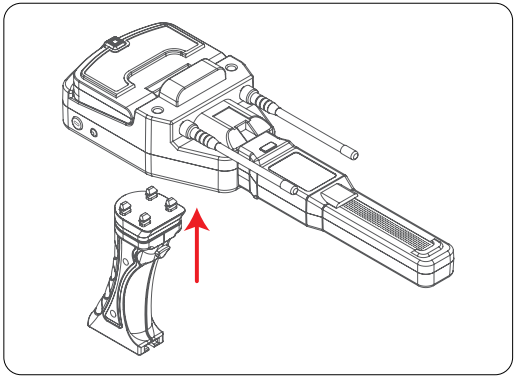


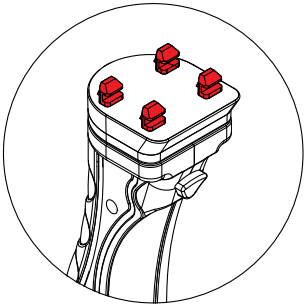


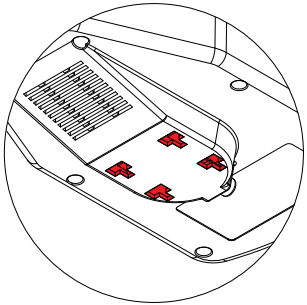


3- Install the handle unit on the device from the bottom side.

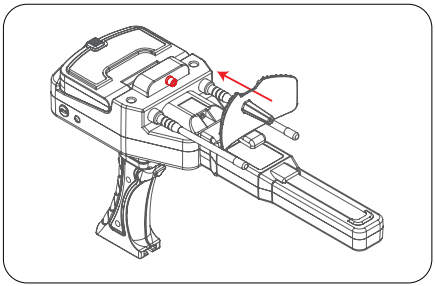
Attention must be paid to inserting the four pegs located on the upper side of the wireless handle unit directly into the correct slots corresponding to them at the bottom of the main unit of the device, correctly.

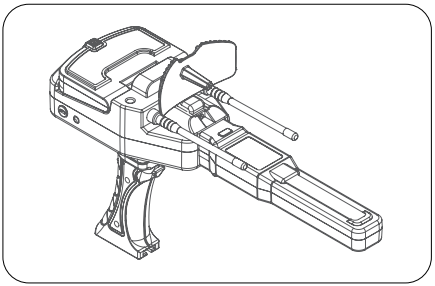






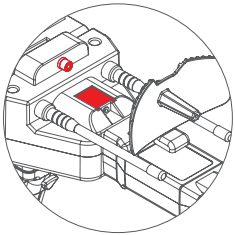
4- Install the signal booster dish in the correct place as shown in the pictures below.

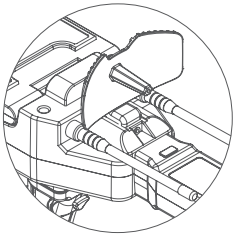




The signal booster dish is a very distinctive and powerful addition to the Water Line device, as this dish helps enhance all the signals captured by the device. This will help the device better identify all the different signals in the search area.

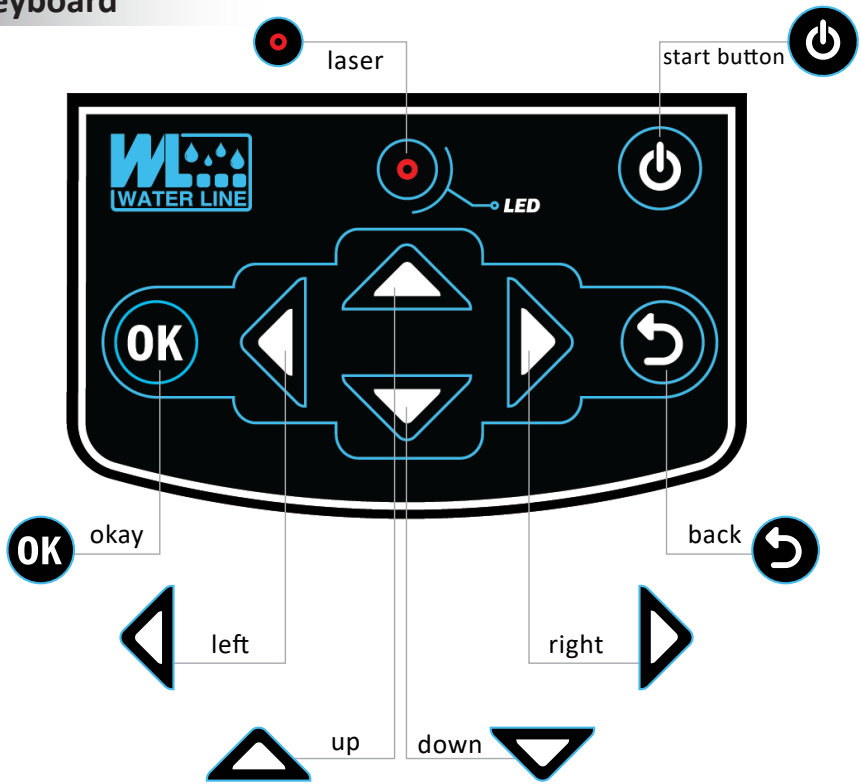
Please take care to insert the signal booster dish in the correct place as shown on the side.






Screen unit
Signal booster dish
Fashlight
new!
Sensor lock
Display screen
Antennas
Keyboard
Charging socket
Type-C
new!
Sensor light
Handle Lock
Charging light
Smart sensor
Start button
Rotation lock
Wireless handle unit
Handle charging socket
Type-C

Keyboard


laser
start button
WATER LINE
LED
OK
OK
okay
back
left
right
up
down

After installing the device, and before starting to use it, make sure that the device and the wireless handle are connected to charging until the color of the charging button changes from red to blue.

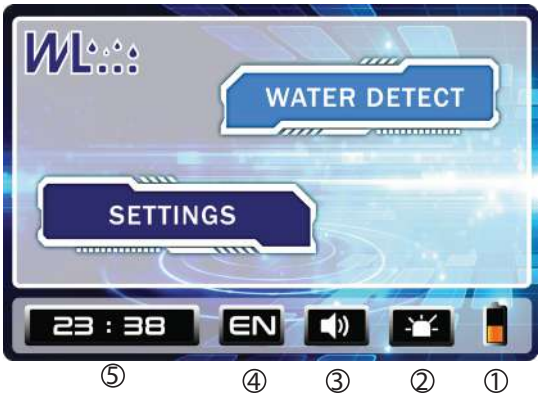
Open the home screen unit, press and hold the power button. Wait a little while until the download is complete. The main screen will appear first.

Splash screen

We strongly recommend that the device be in a flat and horizontal position when operating the device for the first time.

Main screen

main menu



① **Battery:** Shows us the current charge percentage of the device.
② **Flashlight:** to turn on or off the Flashligh, we can press the led button.
③ **Clock:** We can set it from the device settings.
④ **Sound:** We can control it from the device settings.
⑤ **Language:** Here it shows us the language used in the device, as the device contains eight international languages, which we can also change from the device settings.

After turning on the device, you will see the screen below. We can go to the **“WATER DETECT”** option or go to the settings by pressing the Down/Up key of the device keyboard.

To enter one of the main options available, we press the ok key on the keyboard as well.
We choose to start the search from the main menu and press ok, we will see the system settings screen first, as shown below.

WATER DETECT

- **First** In the “WATER DETECT”section we find:

1- Water type:

From the water type option, we can choose the type of water we are looking for in the target area. The Water Line device can search for three main types of water; Normal, salty and fresh water.

Fresh water

Salty water

Normal water

We choose the type of water that we want to search for in the area and move on to the next option to complete the search settings.

In the case of choosing the type of normal water, the user must search in an area and soil compatible with the possibility of normal presence. Ordinary water is often present in most soils.

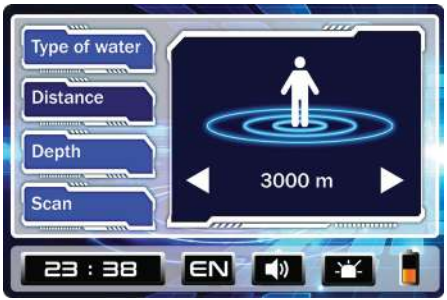
If choosing the saltwater type, we should look in an area with high salinity.

In the case of choosing the type of fresh water, the soil or the area must also have sources or rivers of fresh or drinkable water.

Use the left and right keys on the keyboard to change the target water type.

- **Second** In the “WATER DETECT” section we find:

2- Distance: It expresses the search distance in the target area.
From this option we can choose the distance we want the device to search the target area. The Water Line device can also search for distances up to **a maximum of 3000 meters.**

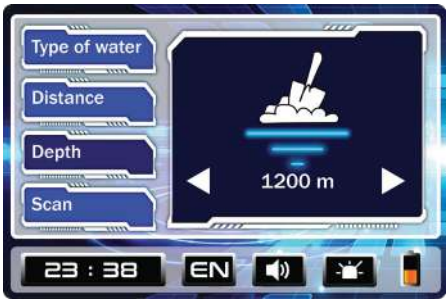


We choose the appropriate distance, and complete the settings...
We also always recommend choosing the appropriate distance for the area in which we are searching, meaning it is not necessary to always choose the largest distance value available in the device.

Note: By long pressing the left/right keys, the values will change faster.

- **Third** In the “WATER DETECT” section we find:

3- Depth: It expresses the distance of the depth to be searched within or below the target area. The Water Line device is characterized by the ability to detect water up to a **depth of 1200 meters** underground, so that it is able to discover most targets in the search area.



Use the left/right keys on the keyboard to change the desired depth.
We also always recommend choosing the appropriate distance for the area in which we are searching, meaning it is not necessary to always choose the largest distance value available in the device.

Note: By long pressing the left/right keys, the values will change faster.

- **Fourth** In the “WATER DETECT” section we find:

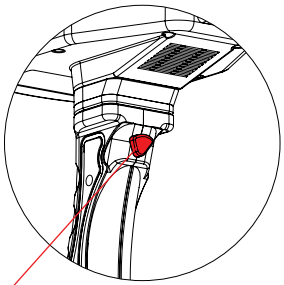
4- Search: Or the option to start the search, after which we will move on to the search process. From here we can see all the settings that we specified in the previous options. We make sure that we have chosen the appropriate settings for our search, and press the OK button on the keyboard to start scanning.

If we want to change one of the previous settings, we can use the up/down arrows, and go back to the search option again to start the search.

By pressing OK key on the keyboard, the search screen will be displayed, Continue to the following pages to explain the details of the search screen.

After completing the initial settings, and pressing the OK button, a warning window will appear, as shown below. Press the Start button on the top of the wireless handle or the OK button on the keyboard to start the calibration and enter the search screen.

Note: In order to reset the calibration, press the start button on the handle and wait 5 seconds for the reset process to complete. Always try to keep the device horizontal.



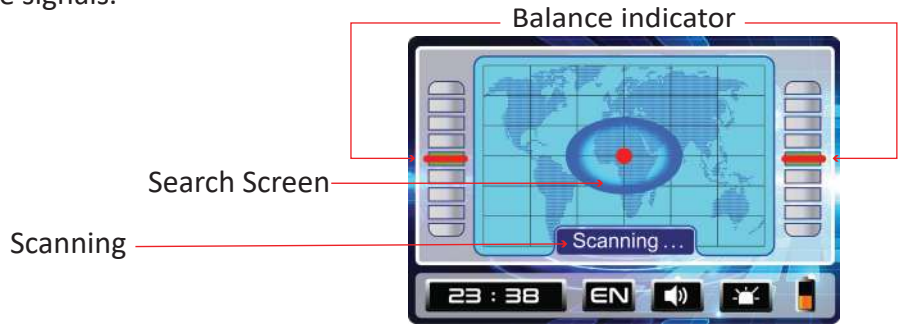
After completing the initial settings, and skipping the previous warning, the search screen will appear.

Screen description:

Search screen: This screen shows us within the large box the ongoing search process according to the previously selected settings.

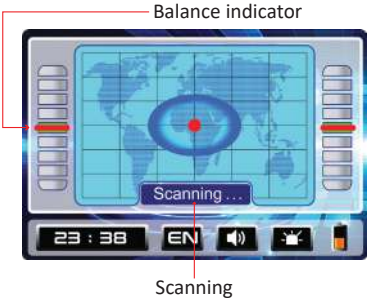
Balance indicator: This indicator shows the balance of the device in relation to the direction of the horizon. To get a better result when searching, this indicator (red line) should be on the green line in the middle.

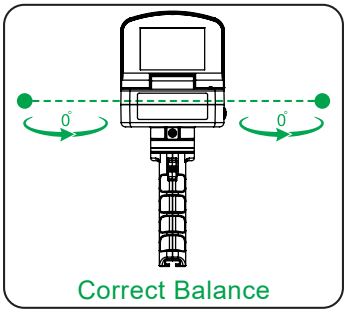
Scanning: In this box, the search process is displayed for the type of target pre-selected in the system settings. When the device begins to find signals close to the potential target, it will start to rotate around its axis towards these signals.

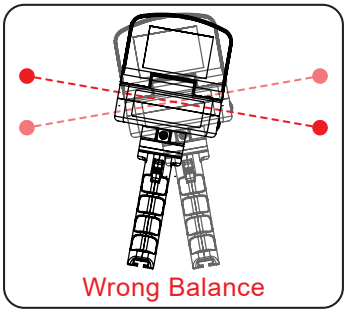


Adjust the ground balance

Scanning: In this box, the search process is displayed for the type of target pre-selected in the system settings. When the device begins to find signals close to the potential target, it will start to rotate around its axis towards these signals.







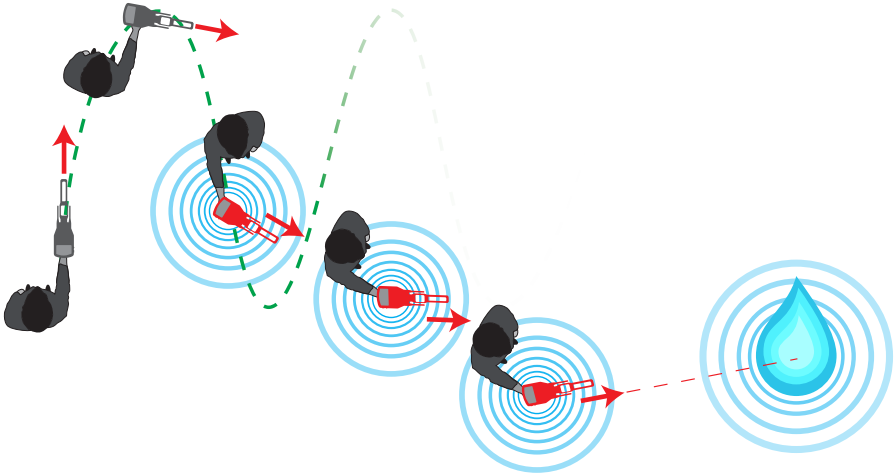
The correct way to set the balance indicator (red indicator on the green line): This indicator shows the balance of the device relative to the direction of the horizon. To get a better result when searching, this indicator (red line) should be on the green line in the middle.

1: The search method according to the zigzag path in the event that the device does not rotate: In the case of the initial or natural search, that is, when there are no targets or signals picked up by the device in the current search area, we must always advance according to the zigzag path, in order for the device to capture and analyze as much signals as possible in all directions of the surrounding area.

We always recommend starting from the northern region of the target search area. **Until the device begins to rotate on its axis**. Then the user must follow the method of determining the target area, which is described in Paragraph 2.

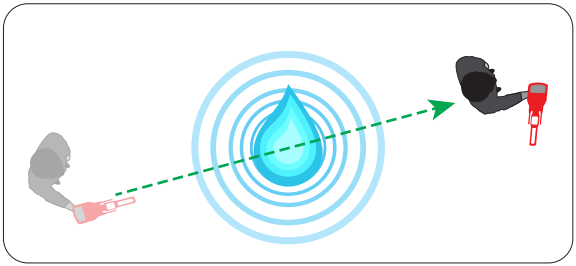
2: Determine the target area if the device rotates:

Suppose that we are now advancing in the specified search area through the winding path, and at some point in this path the device begins to rotate around its axis to the right or to the left. .

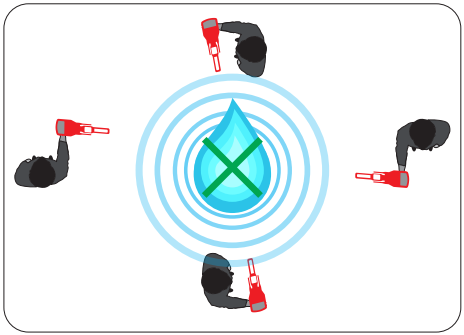


We always advise that we move as slowly as possible when the device starts to rotate, and we hold the device firmly and make sure of the direction of the device's rotation and follow it correctly.. in order to ensure a correct and accurate search process.

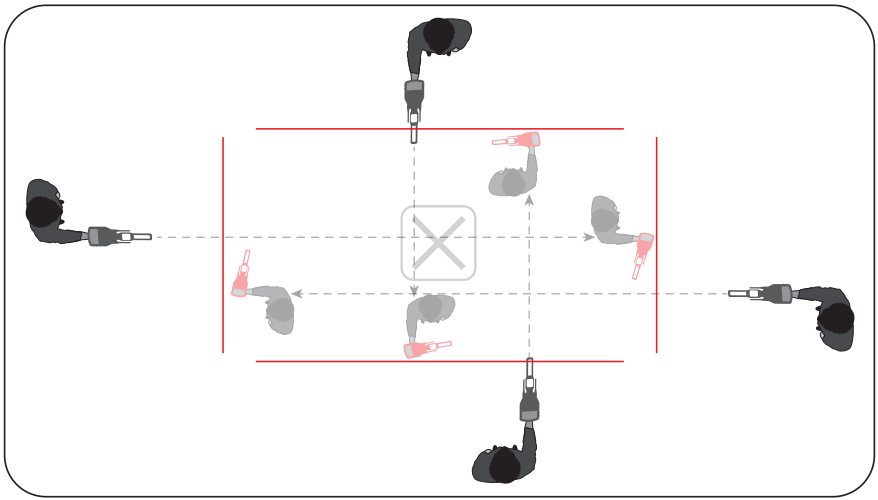
We continue to follow the direction of rotation of the device, until the device begins to rotate around its axis for more than 90 degrees. Then we mark this point.



We go back in the opposite direction slowly until the device rotates around its axis again for more than 90 degrees, we put a mark at this point as well.. We repeat this process from different directions of the search area and we put a mark at every point where the device rotates.



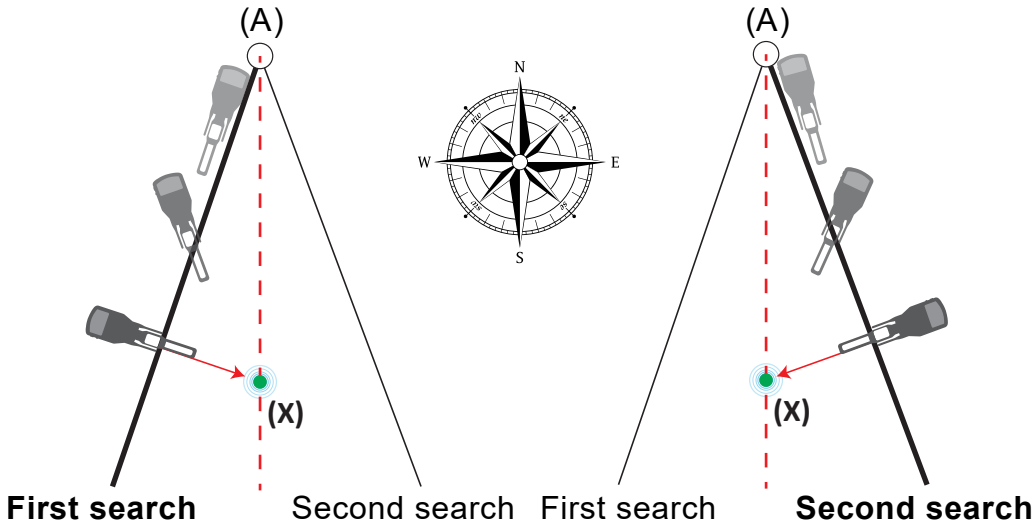
We will notice that it has begun to form a rough outline of the target area. We will notice that the device is always rotating towards a specific point or area.



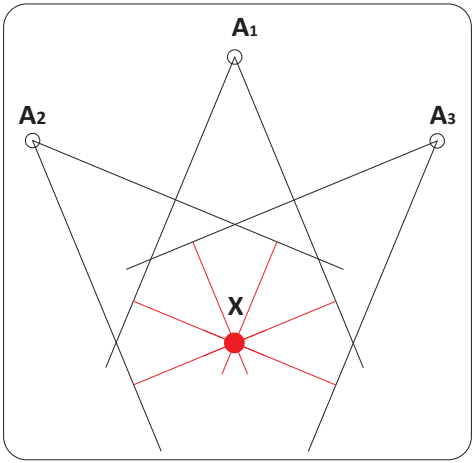
We move away a little from the drawn area and start heading from the northern side towards it. At every point where the device rotates more than 90 degrees, we draw a new transverse line. We repeat this process from the four sides of the target area. We will see that a square or rectangular drawing of this area begins to form. Let's say this area is (X).
We follow the next step (the process of verifying the target area) to confirm and limit the target area more accurately.

3: The process of verifying the target area:

We start by moving from area (X) a few meters towards the north and select a new point (A), then we move from the right and left of this point towards area (X). If the direction of rotation of the device in both cases is towards the area (X), this means that the area (X) is the potential area for the target's presence.



In order to better limit the target area, we repeat the previously mentioned process in more than one different direction of the potential target area (X).
If the direction of rotation of the device is always in the direction of point (X), this means that point (X) is the potential area where the target is located.



We always recommend that we proceed as slowly as possible while researching this situation.

We can access the device settings from the main menu. To enter any section of the settings, we stand on the selected section and press the OK button on the device keyboard. The device settings sections are:
Time - display - sound - language - info

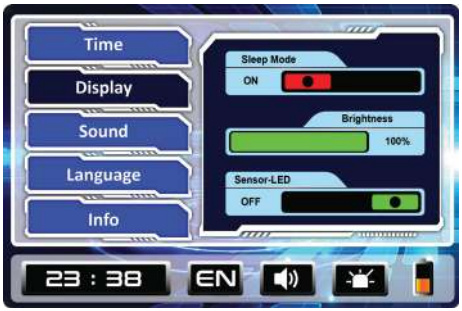
- **Time:**

We can use this section to set the device clock time. To change the time, press the OK button on your keyboard once to move to the Time section. The clock number will then change to red. Use the Up and Down keys to change the clock. To move to the minutes pane, press the right key, and use the up and down keys to adjust the minutes.

When you turn on the device for the first time, the language setting screen will appear. We choose the appropriate language for us, after which the main screen of the Water Line device will appear.

- **Display:**

In this section of the device settings, we can see the settings related to the screen such as sleep mode, screen brightness, and smart sensor light.



- Sleep Mode:

With this option, the device screen will go to sleep mode and turn off if the device is not used for one minute. To turn the screen back on again, tap a key on the keyboard. To turn the sleep option on or off, we press the left / right keys on the keyboard.

- Brightness:

Use this option to adjust the screen brightness level.

You can increase or decrease the brightness of the device's screen using the left/right keys.

- Sensor LED:

By turning this option on, the lighting indicator of the smart sensor will be turned on during the search, as the user can see the search results of the multiple device systems also through the color of the sensor light.

The blue color indicates that there are signs indicating the presence of water of the type that we previously specified in the settings.

As for the normal search case, we will see the sensor not illuminated, as shown in the pictures below.

normal search

presence of water

- **Sound:**

In this section, the user can control the volume of various sounds made by the device, such as the general sound of the device, the sound of keyboard clicks, and the sound of a running scan.

- **Language:**

The device interface is available in 8 languages:

English - German - Spanish - French - Russian - Italian - Arabic - Persian

We can change the language of the device, after entering the language settings section, using the left / right keys of the keyboard. (With every click the device language changes instantly).

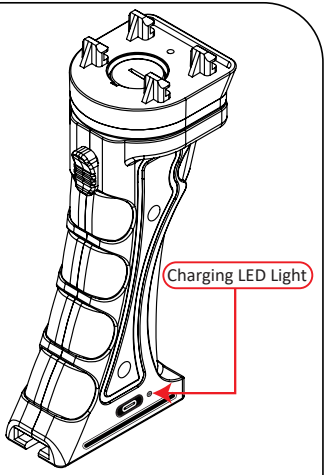
- **Information:**

In this section, the user can see the complete information of the device. (This page's values cannot be changed).

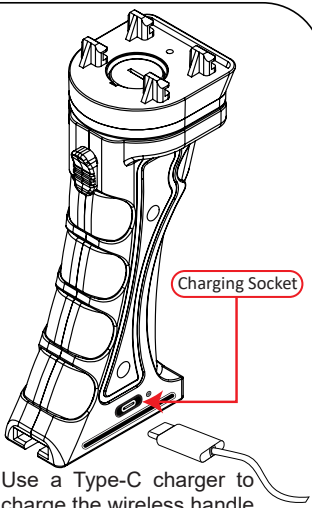
After you have finished adjusting the settings, you can return to the main menu by clicking the “Back” button on the keyboard.

Wireless handle charging

This device is equipped with an RF system for wireless communication between the device and the handle. After prolonged and intensive use of the device and the handle, the capacity and charge of the handle may decrease. Here is how to charge the handle.

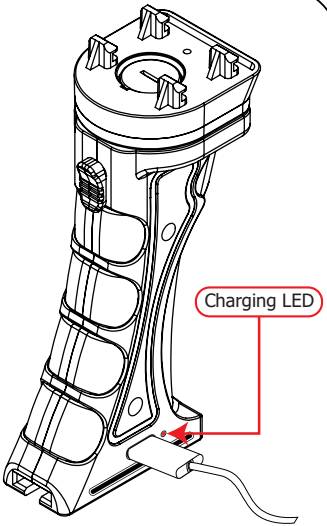


1 The charging LED light will be colorless when the handle is in the non-charging state.

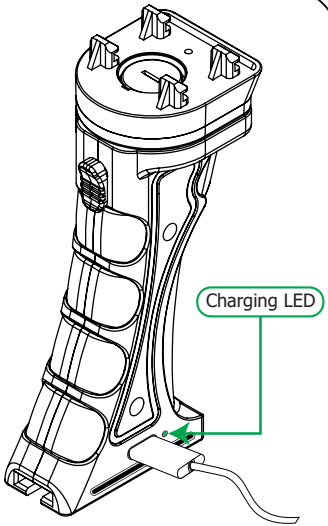


2 Use a Type-C charger to charge the wireless handle by plugging it into charging socket on side of handle.

Please pay attention to charge the handle of the device, at least once, for a minimum of 5 to 10 minutes, before use.



3 The charging LED next to the charging socket, will light red, that means the handle is charging



4 The light turns green when the handle is fully charged

Technical specifications

Screen	Type:	TFT LCD HMI
	Size:	3.5 Inch
	Resolution:	480 x 320
	Color:	64 K 65536
	Back Light:	LED
Sound	Output:	Speaker + Headset
	Jack Type:	3.5 mm
	Internal Speaker:	3W
Charger	Input:	100 - 220 V 50 / 60 Hz
	Output:	5 V - 3 A
	Socket:	Type-C
Battery	Type:	Lithium Ion
	Input:	5 V - 2.5 A
	Capacity:	9600 mA
	Removable Battery:	No

CPU	Type:	ARM
	Frequency:	72 MHz
Memory	Type:	SD
	Capacity:	2 GB
Package	Dimension:	400 mm X 300 mm X 160 mm
	Weight:	3200 g
Temperature	Operating temp.	0 - 40 C
	Ration:	Yes
Other	Flash LED:	5mm
	Ration:	Yes

Important warnings before use

1. Do not install or assemble the device without reading this user manual.
2. No part of the Device may be disassembled or repaired except by Geoground or its authorized service centers.
Any disassembly of the Device or any of its parts by any person or entity not authorized by Geoground; to void the device warranty.
3. Make sure that there are no metals of any kind while using the device.
4. Do not store the device and its components at low or high temperatures for long periods.
5. It is preferable not to use a different charger than the original charger for the device (you can request another original charger for the device in case the original charger is lost).
6. Please protect the device and all its accessories from water, extreme heat and harsh conditions.
7. In order for the battery life to last longer try to charge the battery at least once a month.

water line

detect all types of groundwater

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