

# VIGOR

## User Manual



**VIGOR User Manual**  
The latest gold, metal and cave detector



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The operating in high voltage areas would limit the results and performance



It's better to turn off mobile while using the device.



Don't operate two devices with same method of search at the same place



Don't store in high temperature or high humidity



Disconnect the batteries before long time storage



The operator Must remove any metals that might affect the operation eg: Rings, watch, belt....



Any attempt to tamper the device or unapproved maintenance would void the warranty



For best power endurance and reliability. use heavy duty and high quality batteries that's for the devices which work on removable batteries



- ❖ The user must practice before starting the detecting operations and discoveries
- ❖ Store in Cool and dry place 15-40 C 5%-75% humidity



Read & Understand  
The User's manual  
before using this device

Search for	Search for minerals, precious metals and cavities in the ground.
Search System	Long Range Locator System, the system detects the energy levels around the target (LRL System)
Operating processor:	MICROCONTLLER PIC18 & ARM 7
Processing procedures	LRL treatment for energy levels formed around the target's ground area
Depth of search program:	20 m
Distance of search program:	2000 m
Automatic and intelligent guidance system:	Yes, through the graphical interface indicating the locations and direction of the target
Voice alerts:	Yes
Vibration alerts:	Yes
Power :	Two Li-IoN Cells 3.7v/2000 mAh
Battery working hours	6 working hours
Charger	9 volt 2Ah / 3 hours for full charging
Display Type:	TFT Color Monitor 65536 , " 5 Color, 48Mhz , CDMA GPU

Operating temperature:

From °15 C to °60 C

Storing temperature:

From °15 C to °40 C

Humidity:

It can be stored and operated at the average air humidity level of %5 to %80.

Device weight

1.25 KG with the case

Device dimensions

22 x 11 x 4.5 cm

case dimensions

22 x 11 x 4.5 cm

## Main unit



1 ON/OFF Button

2 Back Button

3 Move Button

4 Enter Button

5 Display Screen

6 Transceiver Antenna

7 Signal Support Antenna

8 Carrying handle

9 Charge socket

10 Battery case

### Main Unit

It is the unit responsible for leading the search and controlling the attached units and processing the data extracted from the ground and displaying it on the screen using the most advanced interactive programs and systems



### Transceiver and signal support antennas

Two radio antennas to send and receive the waves comes from the target due to the high sensitivity transmitted waves



### Grip

A free-moving handle allows the device to rotate and axial movement, with the advantage of direct jaw installation, easy and practical



### Charger

An electric charger to recharge the device's battery

Values: Input: 240-100VAC / 60-50Hz / 0.4 amps

Output: 10 volts AC / 2 Amp / 15 Watt.



## Set up and work on the device

- ❖ Turn on the device by pressing longly the Power button
- ❖ The boot screen will appear after that, the language selection interface,when the first start of the device

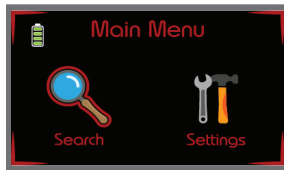


- ❖ When selecting the language by switching between it by press on move button, the desired language is selected by pressing the Confirm button, then the device will back to the main interface

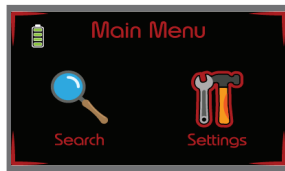


The main interface contains two search icons "Search" to enter the search system and start searching and "settings" to adjust the device's settings, and it has an indicator indicating the battery level present in all interfaces. The movement between the icons is done by pressing the Move button, to confirm one of the two options, we have to press the Confirm button Enter

❖ When selecting the search icon

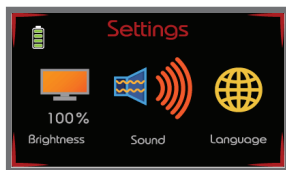


❖ When selecting the setting icon

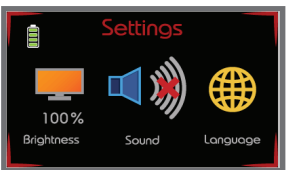
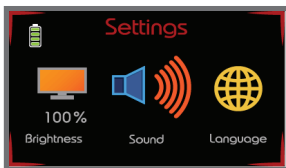


- ❖ When selecting the settings icon and pressing the enter button, a settings interface appears which allow us to reset the device, the settings interface contains options for adjusting both brightness , sound and language

- ❖ **Brightness Adjustment:** When selecting on the brightness icon, the screen brightness value is changed by pressing the Enter button to change the brightness value according to ten levels of brightness from 10% to 100%



- Adjusting the volume: When selecting the volume icon, the volume is changed by pressing the Enter button to change the volume according to five volume levels in addition to the silent mode, and we can also activate and deactivate the vibration by long pressing on the Enter button

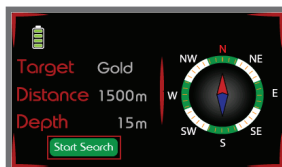
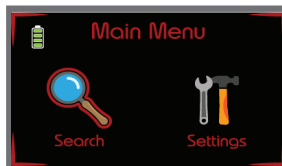


- ❖ Language setting: When selecting the language icon to change the language, we press the Enter button to go to the language interface. The device has four languages: English, Turkish, Spanyol and Arabic. The transition between these languages is done through the move button. To confirm one of the languages we press the ENTER button



- ❖ To back to setup menu press back button

- ❖ When choosing the search icon and pressing the Enter button, the interface of the search system appears, we can move between search parameters by using the move button. First we determine the type of target to be searched from among the following ten available multiple targets: (gold - raw gold - silver - bronze - copper - aluminum - iron - cavity - diamond - emerald) by pressing the Enter button, in the same way each of Parameter Distance and depth. Before starting the search, we install and equip the device's attachments



## Long Range Locator System LRL



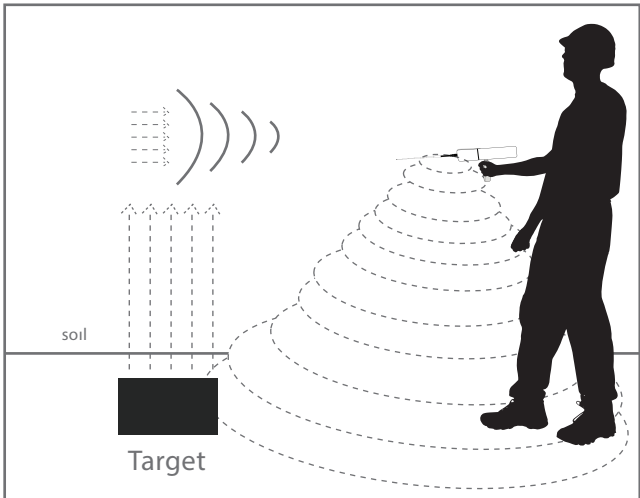
1 Connect the telescope transceiver antenna

2 Connect the signal support antenna

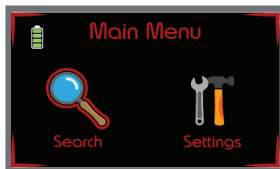
3 connect the carrying handle

This system works on the technology of transmission and reception, it sends and receives waves at the same time, it searches for the target according to its types by sending a signal with a frequency corresponding to the resonant frequency of the buried metal. A static magnetic field is formed around the minerals buried underground, which is affected by the magnetic field formed around the transmitted electrical signal

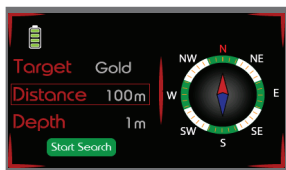
This device relies on its detection of various types of metals and precious metals through the effect of the waves emerging from the device in the fields of static electricity formed around the target as a result of its presence under the ground. , The device receives this amplification signal and directs it towards the target location directly and accurately, through the automatic guidance indicators on the screen



## How to work with the search system



- ❖ After preparing the main unit and installing the attachments, the main unit must be turned on then selecting the search icon, and pressing the Enter key, the search settings interface will appear as shown in the pictures

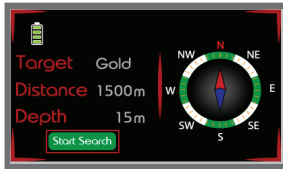


- ❖ The interface of the long-range search system contains the search settings that are specified by the user, namely

Type of target to be searched for: **gold - gold nuggets - silver - bronze - copper - aluminum - iron - \* cavity - diamond - emerald**

Distance: Search distance in all directions (2000 - 1500 - 1000 - 750 - 500 - 250 - 100)m

Depth: the depth of the target to search for (20 - 15 - 10 - 7 - 5 - 3 - 1)m



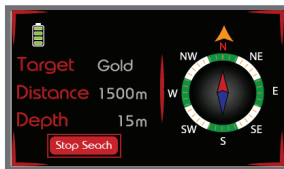
- ❖ When the search settings are finished, we go to the start search icon by clicking on the move button in the main unit to see a frame around the Start Search icon

- ❖ Then we press the enter button to start the search process

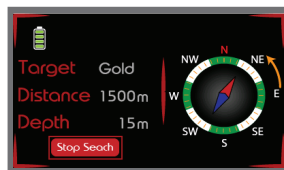


- ❖ We notice the compass movement indicating the direction of movement
- ❖ When the device detects a location for the target location, we will notice that the device is heading towards this path of the specific target's location to start an accurate tracking process for the target's location and path

## ❖ True tracking



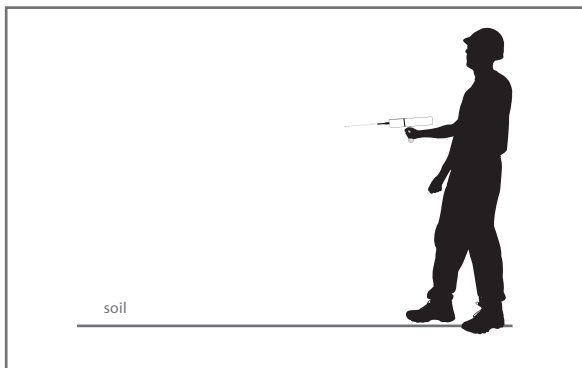
- ❖ When the user deviates from the device to the left, the correction of the search path towards the target will appear by taking corrective indicators either to the left or to the right



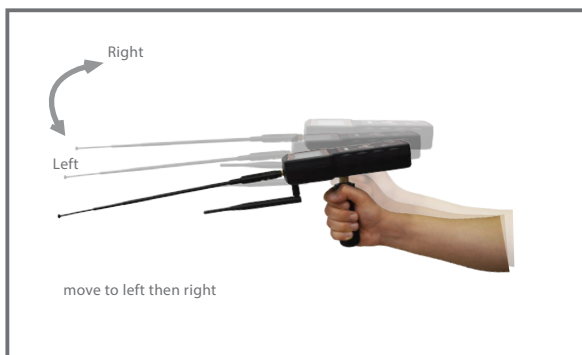
- ❖ You can pause and resume the search, as well as modify the search settings



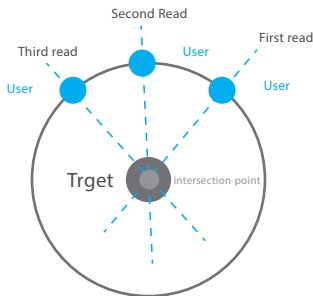
- ❖ The user must carry the device through the carrying handle so that the device is horizontal with the ground and slightly tilted towards the soil as shown in the drawing



- ❖ Then we stimulate the waves and fields coming out of the device, where we move the device by hand to the right and then slowly left, and then the hand that holds the device is fixed



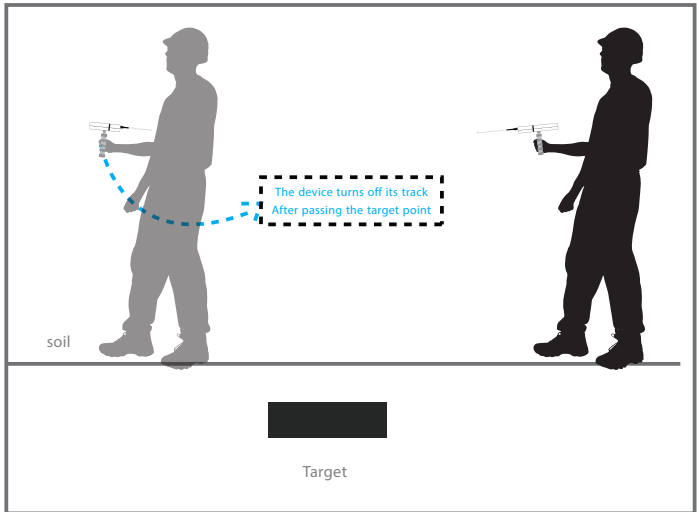
In the event that the target that has been searched for is present, the device will receive a reading and signal, and that is to change the device's path automatically from the normal path on which it was settled to another path. This direction is the direction of the target's location, and then the device is installed in the same direction. Install the target location by pressing the Move key, to notice that the device starts when the user deviates from the device from the target direction, and the correction signal appears for the search path towards the target by taking corrective indicators either to the right or left. With a sound alert sounded, after that we turn completely from the direction that the device is directed to, to an opposite stop point to notice that the device's path is changed again and direct it to the location of the target and the sound alert is continuously triggered, we press the move key again to finish the installation and we move away From the first meters away from the first point on the side, and we stimulate 1- reading point, we stand in another location the waves of the device again and install the device and wait for the reading. move, and we have made sure of the correctness of the target's existence, and we can do this way more than once to make sure of the correctness of the target's direction, by taking more than one reading from the device from different points, and if we noticed theoretically that all the readings that we have made will be interrupted With one point, which is the place and point of the target



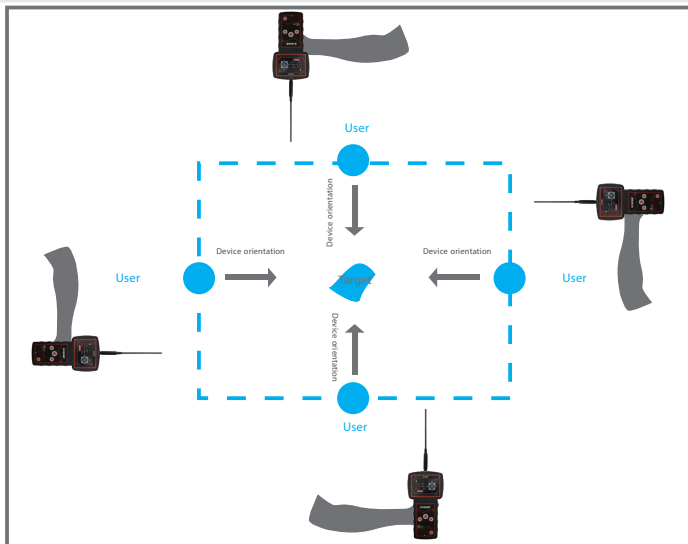
The user can know and estimate the distance of the target from the starting point of the search, and to do this we change the level of distance, and we choose a distance from the list of distances, for example if we had chosen at the beginning of the search a search distance of **500** meters, we reduce the distance to **250** meters and then press the key (Enter) again, and the device starts searching and we do the previous steps, and at this time we carry the device and wait for a reading Better, and then move to the stage of locating the target location

## How to locate the target

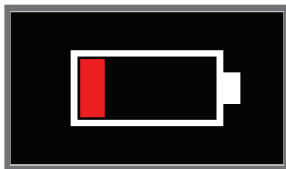
- ❖ First, the user should point the scanning antennas slightly down to the ground
- ❖ After confirming more than one reading of the direction of the presence of a target, we press the Navigation button to install the target path, and we walk in the same direction and in the normal position to carry the device. It is an arrow indicating the side of the turn to return to the correct path, until we reach a point where we exceed the target's location, and we will notice that the device has changed its direction automatically from its natural path to turn back to the location and point of the target's presence, here we also rotate with the device to the location of the target and walk Slowly, and when we are directly above the target site, we will notice that the device will start to rotate left and right, and this indicates that we have identified the target location



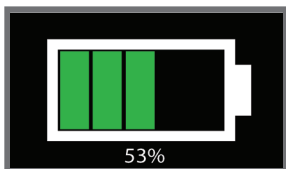
- ❖ There is another way in order to be able to determine the target's location more accurately, we do the process of squaring the target location by taking readings of the target point from four corners in a square shape from a distance of three meters from the target site, we will notice the intersection point of the direction of the four readings theoretically, it will be the midpoint of the target



The user can know the approximate depth of the target by going back to the main menu and selecting the search settings again completely and changing the depth level through the depths menu, that is, for example, if the depth that was specified for the first time was **20** meters, we reduce the depth level to **10** meters and we enter the information, and move away About the target site **20** meters and we carry the device and wait for a reading of the target site, if there is a reading of the target site here we know that the depth may be within **10** meters, and we do this process to reduce the depth level until we know the approximate depth of the target



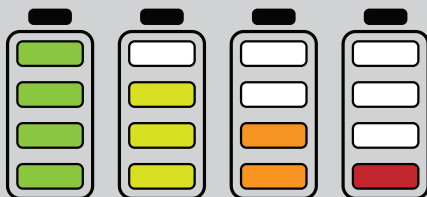
- ❖ When the battery charge runs out, the battery screen appears as shown, where we show the battery image in red flashing, with a sound alert



- ❖ When the device is put on charging in the off state, the charging screen appears, which is a battery that increases gradually and shows the percentage of the battery level for ten seconds, then turns off the device. The battery level can be seen during the charging process by pressing one of the three buttons (Input - Return - Move) The screen indicating the charge level appears for five seconds, then the device turns off. When the battery is full, the screen appears with a correct indicator inside the full battery ✓



- ❖ We notice four cases during work that express the extent of the battery charge in different colors in the order from empty to full (red - orange - yellow - green) as shown in the drawing

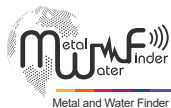


## Caution



- ❖ Use the charger supplied with the device only, and do not use others
- ❖ Store the device and the charger in a safe place, away from inflammable materials
- ❖ Make sure to switch off the device after using the device or before storing it
- ❖ Do not keep the charger connected to the device after the completion of the charging process





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