# TITAN X13

## User Manual

www.gerdetect.de


# USER MANUAL

## ENGLISH

GER DETECT

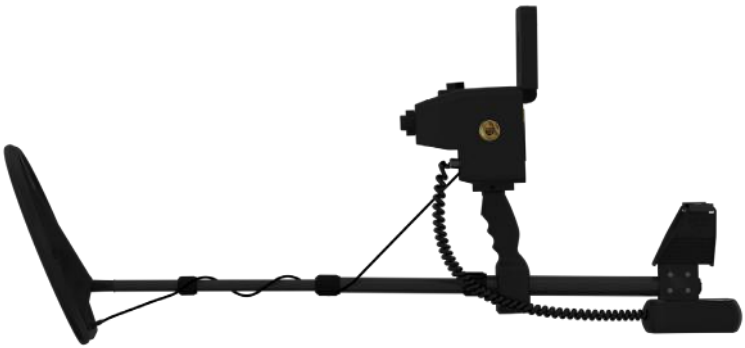
# Index

# Usage Warnings

- Ensure all necessary precautions are taken to avoid usage errors.
- Carefully review the user manual before operating the device to ensure a thorough understanding and to avoid operational errors.
- Do not use the device in rainy conditions.
- Do not operate until all components are properly connected and securely in place.
- Verify that the device's battery is fully charged before operating.
- When the battery level drops below 10%, the indicator on the battery will flash and a beeping sound will occur, turn off the device and recharge the battery.
- The device will automatically shut down when the battery is about to run out.
- Maintain a safe distance from power sources, phone networks, metals, mobile phones, and electronic devices to prevent interference with the device's performance.
- Use only the original charger provided with the device.
- The warranty covers the main unit of the device against all technical defects for two (2) years.
- The warranty excludes damage caused by misuse, including dropping the device, tampering with the main unit, impacts, or improper use.
- The warranty also excludes the following components: battery, charger, tablet, and other accessory parts.
- Improper use or exposure to excessive noise may affect the device's ability to accurately identify targets.

# Device Features and Characteristics

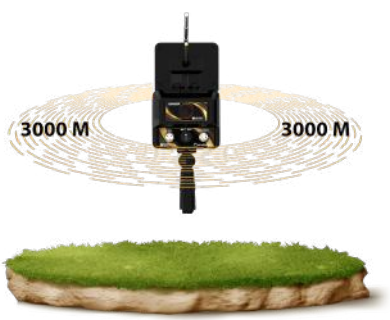
- TITAN X13 detector for gold, buried treasures, precious metals, archaeological tombs, caves and underground cavities.
- Its revolutionary and unique design allows it to operate efficiently across various terrains and challenging climatic conditions, significantly simplifying the search and exploration process.
- TITAN X13 has a superior ability to penetrate all types of mineral rocks thanks to advanced automatic calibration technology.
- The device can also efficiently deal with sedimentary, metamorphic and igneous rocks, including granite and basalt, which are among the most difficult types of rocks that may hinder the performance of many other devices available in the market.
- TITAN X13 works with thirteen different search systems in one device.
- The TITAN X13 represents outstanding German engineering and has earned the European CE certificate and ISO 9001 certification, adhering to international standards.
- This device is designed to work in all countries and regions.
- The device works in different languages: German - English - French - Spanish - Arabic - Persian.



- Titan X13 Search for precious metals such as buried archaeological gold - raw gold - gold veins - platinum - silver - mercury - bronze - lead - copper - cobalt - lithium - coltan - meteorite.

- Search for gemstones and be able to discover 18 different types: Ruby - Emerald - Quartz - Topaz - Garnet - Amethyst - Lapis Lazuli - Tourmaline - Columbite - Tanzanite - Turquoise - Peridot Alexandrite - Cat's Eye - Ruby - Jasper - Opal - Aquamarine.

- Determine the type of soil in the search area (clay - mineral - natural - mixed - sandy - rocky) to obtain more accurate results.
- Capable of covering large search areas up to 3,000 square meters and reaching depths of 60 meters underground.
- Super fast in capturing targets and accurately locating them.
- Equipped with a system for determining the target depth easily and accurately.
- Screens that operate with full touch technology.
- System for determining the continent within which the search is being conducted.

# User Interface and Parts


Once the device is turned on, the main interface will appear on the bottom screen.

Press the button at the top of each screen to navigate between screens.

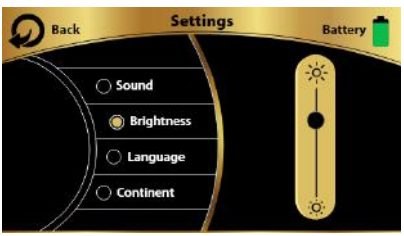

Top Screen

Bottom Screen

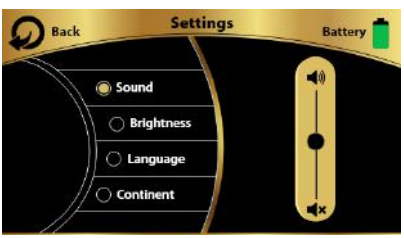
## Settings

Device settings screen where you can adjust brightness, sound levels, language, and continent settings.

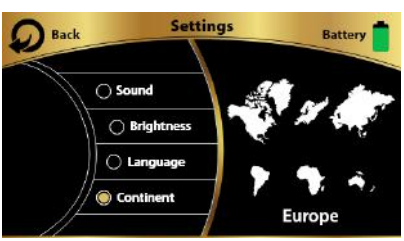
Brightness Control Screen




Sound Control Screen




Continent Selection Screen




Language Selection Screen

# Long-Range System

This system is specialized in covering vast areas of search and is characterized by high accuracy in determining and monitoring the target location and confining it within an area of one square meter. This system can reach a forward range estimated at 3000 meters and a depth of 60 meters underground.

## 4.1 Parts Assembly

**1** Install the device handle.

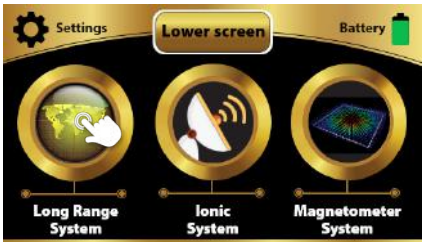
**2** Install the Super Antenna.

**3** Install the transmitting and receiving antennas.

**4** Install the long range unit onto the main unit.

## 4.2 Operation Steps

Select Long Range System

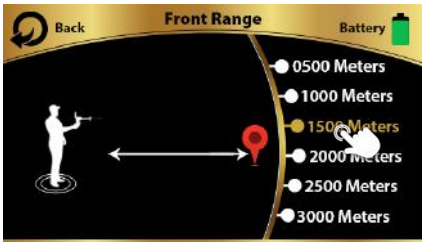



Read the instructions then press the skip button.


Choose the type of target you want to search for from menu.

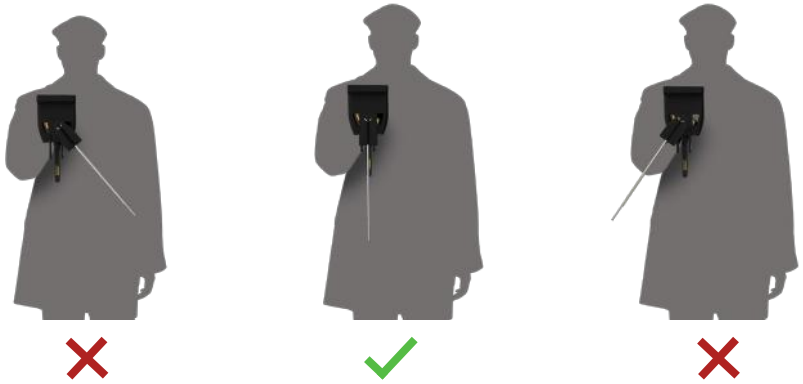

Select the type of soil in the search area: Clay, Rocky, Sandy, Mineral, Mixed, or Natural.

Select the search range you want to reach.

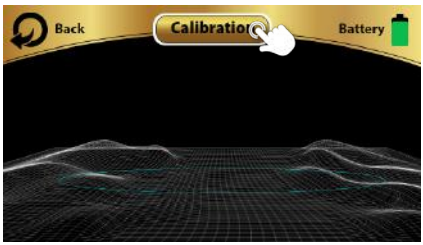


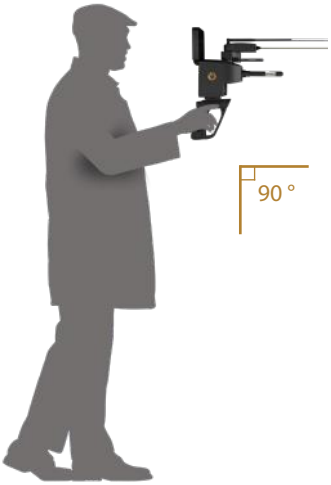

If the forward range of the target to be searched is expected to be within an area of 500 square meters, it is sufficient to specify the forward range within 500 meters. However, if the forward range of the target to be searched is unknown, you can specify the forward range up to 3000 meters.

Point the device vertically towards the ground and wait until the antenna movement is completely stable to complete the calibration process.



Then, press the calibration button on the search screen.





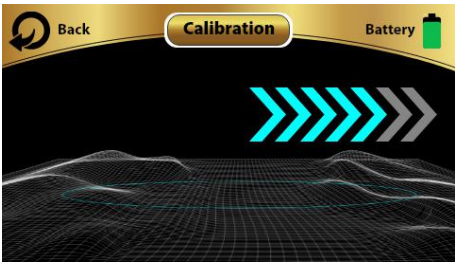

Then hold the device at a 90 degree angle and start walking to search for the target.

If no signal is obtained, change direction:

- East to West.
- West to East.
- South to North.

When a signal is detected, the device activates three functions simultaneously to confirm the target's presence.

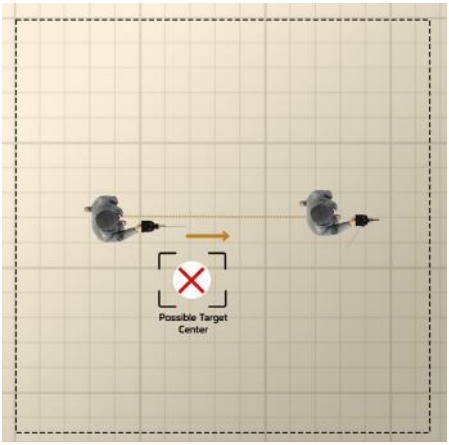
- The main unit will rotate toward the target signal.
- A direction arrow appears on the screen.
- A sound is emitted.

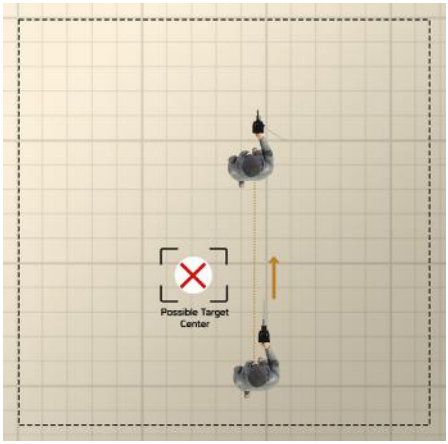


The indicator moves within the search screen and the signal receiver moves, indicating the presence of a target signal.

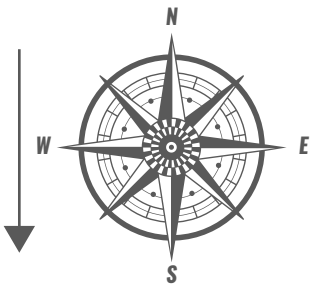
Follow the signal; when the device turns back, you have passed the target.
Limit the search location by placing a mark that will be the center of the target confirmation operations.

Confirm the location of the target from the four directions: (from south to north - from north to south - from west to east - from east to west).




**Note:** During the search, the explorer must stand facing north to south. As the ionic fields are radiations emitted by gold, precious metals, buried treasures, diamonds and gemstones after remaining for a long time underground and interfering and interacting with the soil and the nature of the earth's formation and its alignment with the magnetic lines north and south.



## 4.3 Custom Search System

This system allows you to enter target frequencies manually and search for specific types of gold, metals, diamonds and precious stones according to the area you want to search in, which helps you in a more accurate search process.

When you enter a target frequency, the device will send this frequency to the antennas sending the signal, which in turn searches for the signal emitted by the target that matches the frequency that was entered only.

These frequencies can be selected from the list attached to the device, which contains some gold and treasure frequencies.

### Custom Search System Operation Steps

Select the custom search system from the long-range system menu.


Enter a frequency between 1,000 and 55,000 Hz (e.g., 5,000 Hz), then press the 'Next' button.


Follow the steps mentioned previously in the long-range search from choosing the type of soil and the range to search for the target.

# Ionic Search System

The Ionic Field Search System is a specialized system for detecting ionic fields that form around gold and treasures buried underground.

Ionic fields are atomic rays consisting of atoms emitted by gold and buried treasures after remaining underground for a long time.

This system covers vast areas of search up to 3000 square meters and identifies the target within a range of one meter and reaches a depth of 60 meters underground.

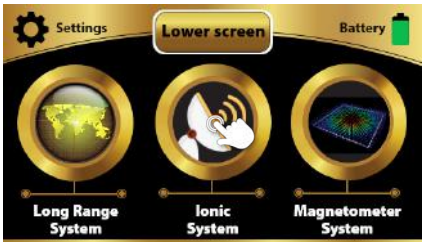
## 5.1 Parts Assembly

**1** **Install the Device Handle**

**2** **Install the Ionic Sensor**

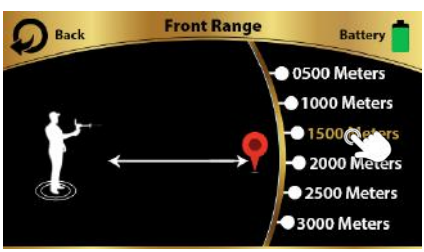
## 5.2 Operation Steps

Select the ionic search system.

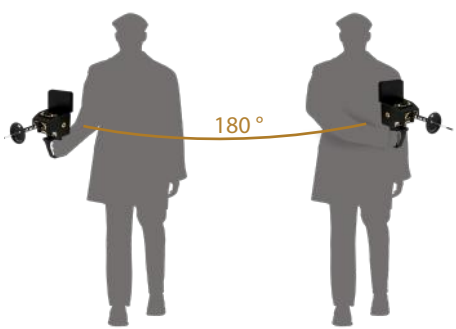



Read the instructions then press the skip button.

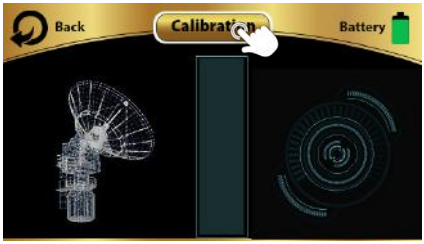

Select the front range you want to reach.



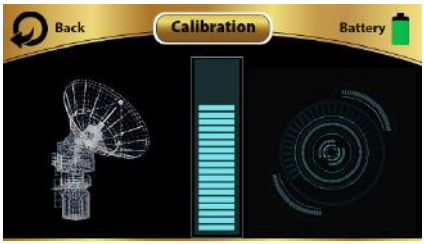

Begin the search by positioning the device parallel to the ground and moving it from right to left in a 180-degree.



After pointing the device, press the calibration button within the search screen.




When a target is detected, the device will emit an audible signal with an indicator appearing on the screen indicating the strength of the signal emitted by the target.




Follow the audible signal and move the device up and down until the strongest signal is received, increasing the likelihood of locating the target.

**Note:**

The target must have been buried for several years or naturally formed underground for the ionic field to begin forming, which increases the likelihood of detecting the target from greater distances and at deeper depths.

Therefore, it is not possible to test the device on gold or precious metals that are either above ground or recently buried, as these targets do not meet the conditions of gold and precious metals that have been buried for several years or naturally formed underground. Such targets lack ionic fields, which the device is designed to detect.

Ionic fields are radiations emitted by metals as a result of their interaction with soil and the geological composition of the earth after being buried underground for an extended period. These fields interact with the earth's magnetic lines running north and south.

# Magnetic Search System

A specialized system designed to detect magnetic metals, such as iron and other magnetized materials, as well as identify voids like caves, tunnels, and tombs. It effectively detects buried metals by sensing the magnetic fields formed over time.

## Metal Detection

This system is distinguished by its ability to detect magnetic metals, such as iron and other magnetized materials.
It also assists in identifying the presence of non-precious metals underground.

The system effectively detects metals buried for long periods, as it can identify the magnetic fields formed around buried metals after several years of being underground.

## Cavity Detection

This system detects different types of voids: Such as caves – tunnels – passageways - and archaeological tombs.

## 6.1 Parts Assembly

**1**

Install the magnetic sensor on the arm holding the device.

**2**

Install the battery to the armrest base.

**3**

Connect the main unit to the device's carrying arm.

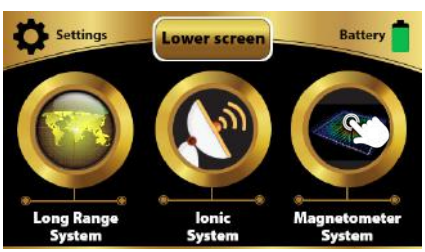
**4**

Connect the magnetic sensor and battery cable to the main unit.

## 6.2 Operation Steps

Point the sensor vertically towards the ground, keeping it 2 to 5 cm above the ground.


Select the magnetic metal detection system from the search options.




Read the instructions then press the skip button.

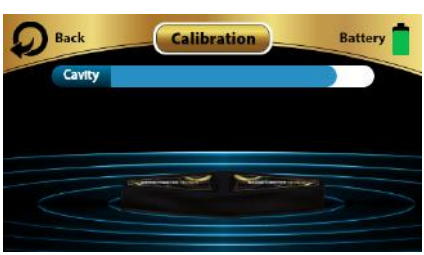
Select on one of the search options.


Begin your search by moving the device steadily in one direction, ensuring consistent movement to thoroughly scan the area. Maintain a straight path to allow the device to effectively detect any targets within the designated search range.

Press the calibration button when changing the search direction.


When a metal target is detected, the device emits an audible signal at the target's location, and the indicator turns red on the screen.


When searching for a cavity, the device emits an audible signal at the cavity's location, and the indicator turns blue on the screen.



# Pulse Induction System

This system has the ability to detect raw gold, gold veins, gold, bronze and silver metals underground. One of the features of this system is ground balance (calibration with the ground) to ensure that it is not affected by any signals resulting from moisture in the soil, mineral rocks, land containing mineral salts or solid ground.

## 7.1 Parts Assembly

**1** Install the search coil onto the device's carrying arm.

**2** Install the battery to the armrest base.

**3** Connect the main unit to the device's carrying arm.

**4** Connect the search coil cable and battery cable to the main unit.

## How to Carry the Device

Pass your arm through the armrest and belt.

Hold the handle of the device and rest your forearm on the armrest.
The correct position of the armrest should allow you to hold the handle comfortably.

Your elbow joint should rest above the back of the armrest ensuring that the detector feels like an extension of your forearm.

## Adjusting the Handle Length

Extend the lower shaft to the user's appropriate length by twisting the locks along the shaft and secure the lock to stabilize the position.

If additional length is required, open the middle shaft and secure the lock on the upper shaft to fix the shaft's position.

## Adjusting the Search Coil Angle

Install the screw that connects the lower shaft to the coil, then tighten it sufficiently to ensure the coil remains securely fixed in place.

Press the search coil gently against the ground while holding the detector, ensuring it is parallel to the ground surface.

Lift the search coil approximately 2 cm off the ground, ensuring it remains parallel to the surface.

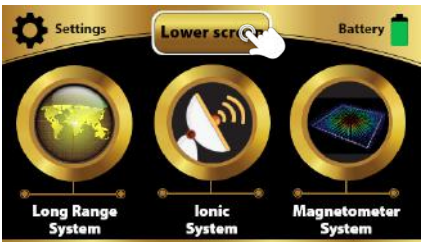
## Important Points When Using the Device

- Keep the search coil away from your body to avoid interference caused by drilling tools or any other metal objects you might carry during the search process.
- Incorrect scanning may result in missing the target or generating false signals.
- Avoid excessive contact between the coil and the ground.
- For optimal performance, keep the coil close and parallel with the ground. This improves detection depth and sensitivity to small objects.

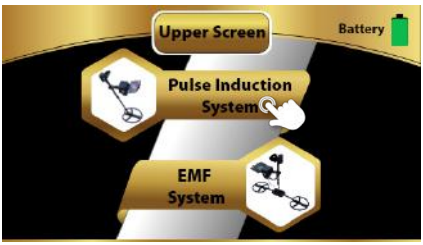
## 7.2 Discrimination System

This system is designed to differentiate between precious and non-precious metals. It is equipped with ground-balancing technology to eliminate mineral impurities that could affect the device's accuracy.

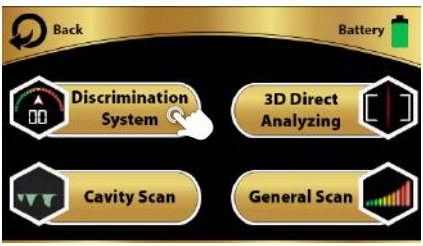
Press the bottom screen button to go to the rest of the device's systems.




Enter the pulse induction system.

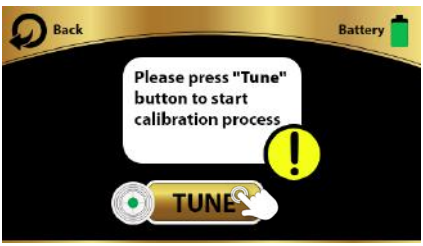



choose the discrimination system.



Direct the search coil toward the ground to ensure proper calibration.

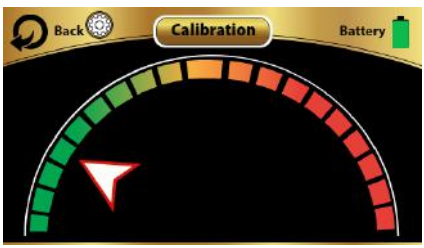
Press the "Tune" button to start the ground balancing process (calibration with the soil). Once the calibration is complete, the system will automatically transition to the search screen.

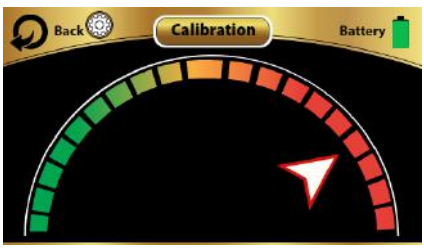



Begin the search by gently moving the device in a sweeping motion from left to right. Ensure the device remains parallel to the ground at a consistent height throughout the process. This technique allows the device to effectively scan the area for potential targets while maintaining accuracy. Repeat the left-to-right motion systematically to cover the entire search area thoroughly.

When a target signal is detected, the indicator will move toward the green zone with a specific sound, indicating the presence of a precious metal.

In the case of a non-precious metal, the indicator will move to the opposite side, toward the red zone, accompanied by a different sound.



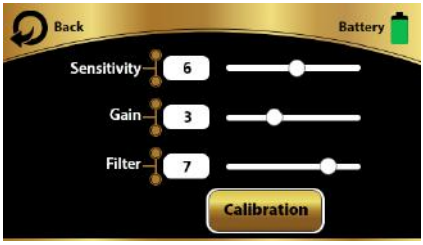




## Controls and Adjustment tools

- Sensitivity level: To control the sensitivity level of the device.

- Magnification factor: To enlarge or reduce the signal emitted by the search coil. In the case of searching for small targets, we increase the magnification factor.

- Filtering: It purifies the signal received from the coil in order to reduce the interference or noise to which the device is exposed. Therefore, the filtering level must be increased in the event of a high interference rate in the search area.



## 7.3 Direct 3D Analyzing

This system is designed to provide comprehensive and detailed information about the detected target, including its type and depth. By delivering precise data, it enables users to accurately identify and thoroughly analyze the target's characteristics. This enhanced accuracy ensures a more effective and reliable search process, allowing users to make informed decisions and achieve better results during their exploration.

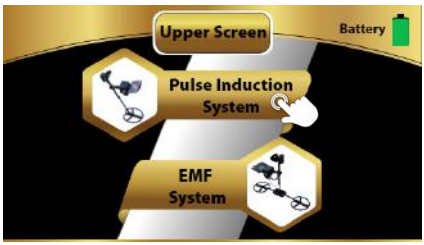
## Parts Assembly

**1** Install the Tablet Holder

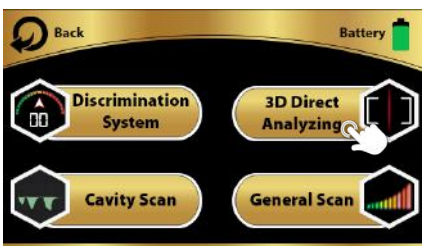
**2** Mount the Tablet onto the holder

## Operation Steps

From the lower screen, enter the Pulse Induction system.



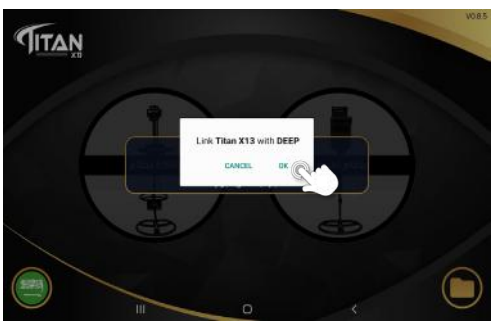

Choose 3D Direct Analyzing system.



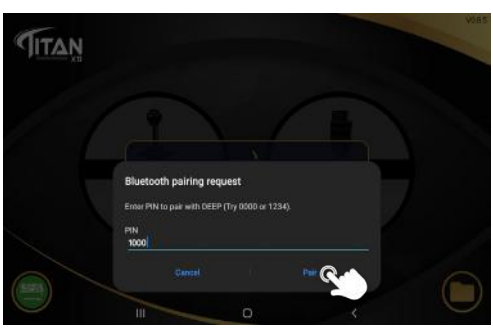

Then press the calibration button to start the automatic calibration process of the device with the soil.


Turn on your tablet and open the Titan X13 app.

Click on the connect button, a window will appear to confirm the connection, click OK.

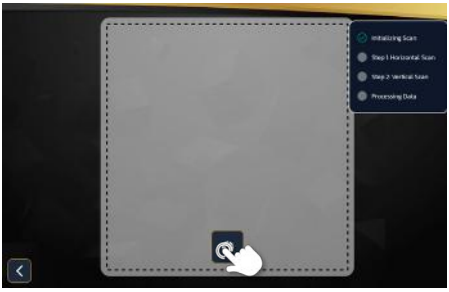



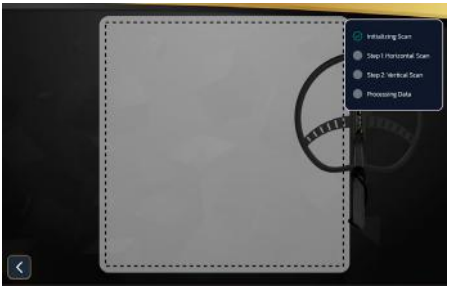

Enter the passcode '1000,' then press the 'Pair' button to complete the pairing process with the main unit.



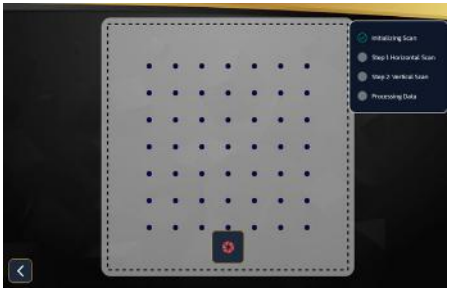
From the tablet, select Pulse System.


Press the shutter button and wait for it to flash red and emit a beeping sound.

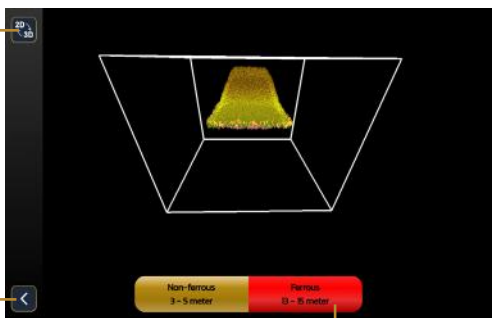


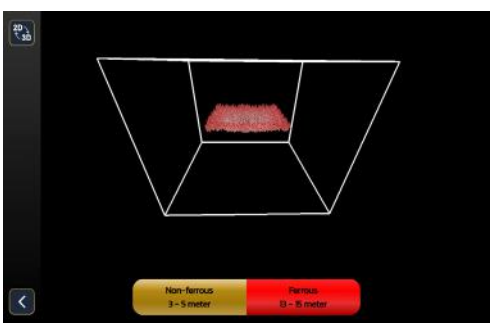


An illustration will appear indicating the search direction. Once the illustration is complete, pass the search coil over the target, only once, and then press the shutter button again to complete the first step of the search.



For the second step, you will move the search coil from north to south. Press the shutter button and wait for the animation to complete. Then, pass the coil over the target only once and press the shutter button again to finish the search and process the data.
Once the data is processed, the screen will automatically navigate to the results screen, displaying a 3D representation of the target.
The results will indicate the type of material—either ferrous or non-ferrous—along with depth information.

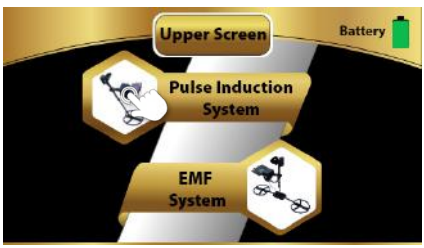


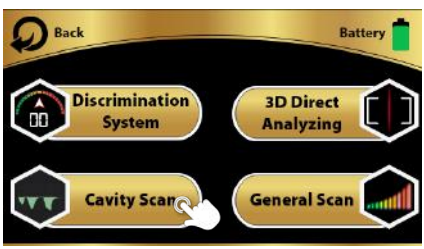
## 7.4 Cavities Scanning System

It is a system that uses pulse induction technology to detect caves and underground spaces such as tombs, cellars, tunnels and catacombs.

Enter the pulse induction system.




Select Cavity Scan.



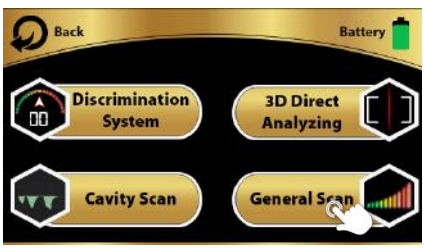

Press the calibration button to start the automatic calibration process of the device with the soil. Then move the device right and left during the search.


When a cavity is detected, the device will make a sound over the cavity with the indicator appearing in blue on the screen.

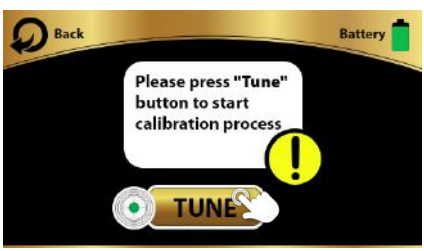
## 7.5 General Scanning System

This system specializes in detecting metals located deep underground using pulse induction technology.

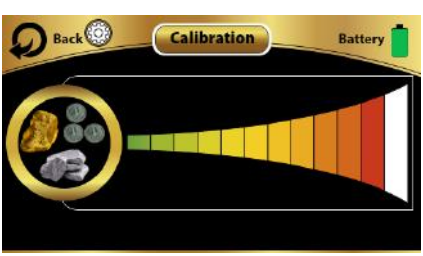
Go to the general scan system from the search options.




press the Tune button to start the automatic calibration process with the soil.




When a target is detected, the device will emit gradually increasing sound and the indicator on the screen fills up.
The proximity of the target to the search coil is confirmed at the highest sound level and when the indicator is filled.



# ElectroMagnetic Field System (EMF)

This system operates by utilizing electromagnetic fields to detect the presence of metals buried beneath the ground's surface. It functions based on the principle that electromagnetic fields are generated when the device passes near metal objects. These fields interact with the surrounding environment, allowing the system to identify and pinpoint the location of buried metals with high precision. By leveraging this advanced technology, the system ensures reliable detection and efficient exploration in various conditions.

## 8.1 Parts Assembly

**1**

Install the EMF coils on the processing unit.

**2**

Connect the coil cables to the EMF unit

**3**

Install the shaft to the EMF unit.

**4**

Install the battery on the armrest base.

**5**

Mount the main unit to the device's carrying arm.

**6**

Connect the battery cable and EMF unit calbe to the main

## 8.2 Direct EMF Scanning System

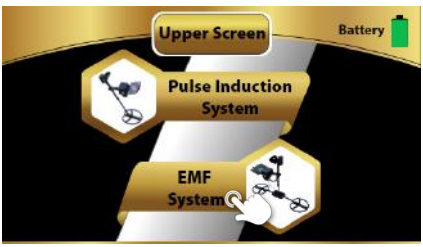
This system specializes in detecting metals, buried treasures, ancient relics and cavities in the ground using EMF technology.

### Operation Steps

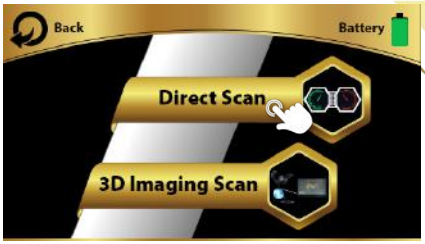
Turn on the EMF unit by ON/OFF button.

Lower the device and maintain a distance of approximately 5 cm above the ground.

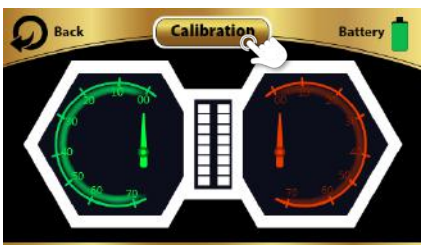

Enter the EMF system from the device screen.



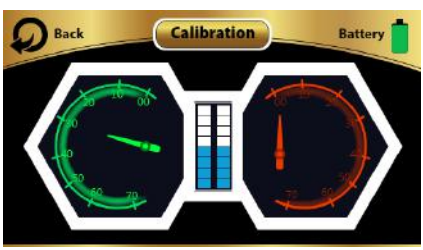
Select the direct scan mode.



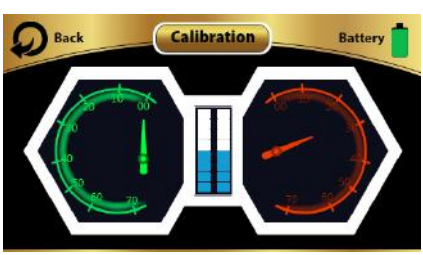

Then press the Calibrate button to start the automatic calibration process of the device with the soil.
Once the calibration process is complete, two indicators will appear in red and




When metals, buried treasures, or ancient relics are detected, the green indicator will activate and emit a rapid sound.




When a cavity is detected, the red indicator will activate and emit an accelerating sound.



## 8.3 3D ImagingScan

This system is designed to perform a three-dimensional imaging scan of the earth's layers, using EMF technology to detect minerals, buried treasures, ancient monuments, and cavities within the designated area.

### Parts Assembly

1

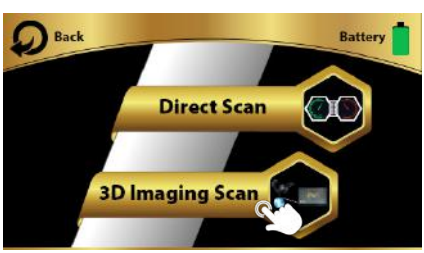
Install the Tablet Holder

2

Mount the Tablet onto the holder

### Operation Steps

Select 3D Imaging Scan



From the tablet, select EMF System.


The EMF search configuration screen will appear, containing the following options:

**Lines:** Represents the number of lines to be scanned in the search area.

**Steps:** Indicates the number of steps within each line.

**Search Direction:** Defines the search movement, either:

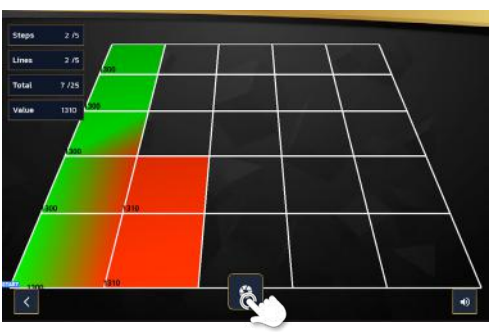
**Parallel:** Return to the starting point of next line after completing each.

**Zig-zag:** Move forward and backward continuously.

Press the START button to go to the search screen.


Example: If you select 5 lines and 5 steps, a grid with five columns and five steps per column will appear. This configuration will require 25 clicks to cover the search area.

Start the scanning process by pressing the capture button on the tablet.

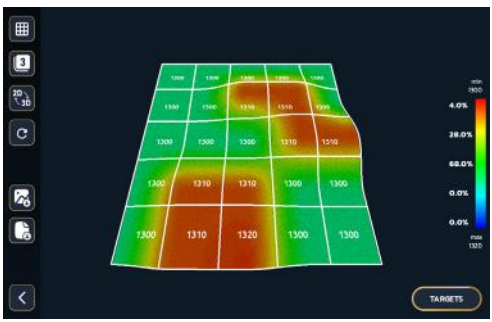



Take a step, then move the opposite foot evenly, pressing the shutter button with each step. The device will capture a data accompanied by a sound.

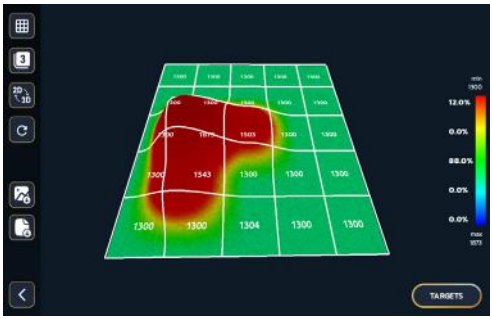
Ensure the distance between each step is approximately 30 cm, and maintain a 30 cm gap between the lines. Continue this process until the first line is fully completed.

After completing the first line, return to the start of the next line and repeat the process for all remaining lines.

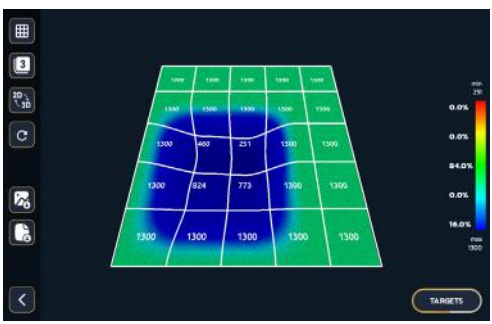
Upon completing the imaging process, the result will be displayed as a three-dimensional image, depicting the approximate shape of the underground target along with a set of analytical tools for further examination.




If a target is detected in the search area, a 'Target' button will appear at the bottom of the screen. Pressing this button will open a window displaying the target's position within the search area along with its depth information.




Metal target



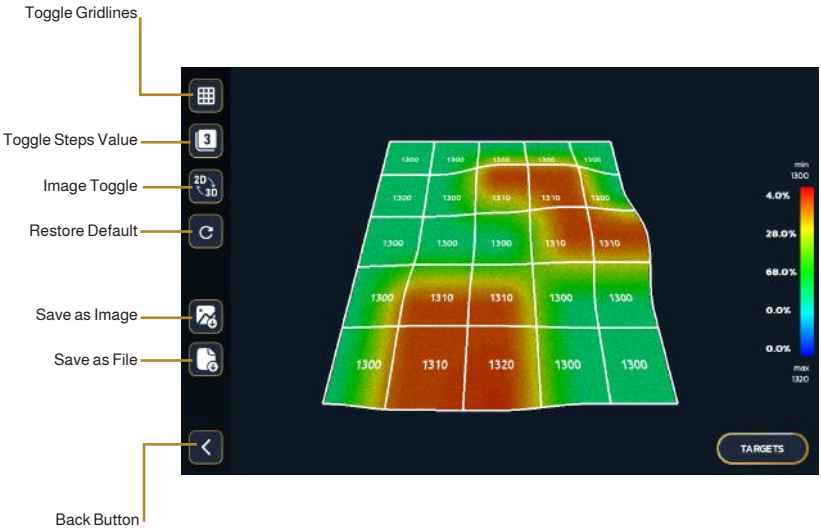

Cavity Target

The following data appears on the screen:

**Targets Button:** This button appears only when confirmed targets are detected and disappears when no targets are present. Clicking on this button will display the type of potential target (metal or cavity) along with its depth and location.

**Color Bar:** A percentage chart displayed within the image, representing different elements detected during the search.

**Step Value:** Numeric indicators that assist in confirming the presence of target.




## Result Image Analysis

The image is divided into the following color codes:

**Red:** Indicates the presence of metals underground.

**Green:** Represents the soil.

**Yellow:** Signifies the presence of mineral salts.

**Dark Blue:** Indicates the presence of cavities underground.

**Light Blue:** Represents the rocks surrounding the cavities.

# Device Parts & Accessories

**Main Unit**

**Main Unit Handle**

**Long Range Unit**

**Super Antenna**

**Reciever Antenna**

**Signal Antennas**

**Signal Enhancer Antenna**


Ionic Unit

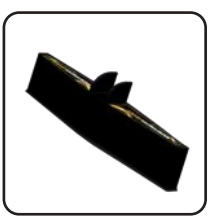

Device
Battery 1

Device
Battery 2

Shaft

Pulse Search
Coil

EMF Search
Coils



Magnetic
Search Unit

Tablet
Holder

Tablet

Charger

Car Charger


Warranty Card

# Technical Details

| Titan X13 Technical Specifications | |
|---|---|
| **Audio Output** | DYNAMIC SPEAKER FREQUENCY RANGE:<br>350~1000 Hz |
| **Liquid Crystal Display (LCD)** | Capacitive Touch Screen full color 480 x 272 px |
| **Frequency** | Long rang system 5KHz _ 65KHz350~1000 Hz<br>PI system 350Hz – 500Hz |
| **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 (54 Wh Battery)** | 10 Hours |
| **Operating Time (27 Wh Battery)** | 15 Hours |
| **Waterproof Rating - Coil** | waterproof to depth of (100 cm) |
| **Waterproof Rating - Detector** | not waterproof (weatherproof only ) |
| **Coil** | Coil : 17Inch |

| BT500 Li-ion Battery Technical Specifications | |
|---|---|
| **Type** | Li-ion Rechargeable Battery - External Battery |
| **Output Voltage** | Li-ion 11.1 VDC |
| **Capacity** | Li-ion 54 Wh |
| **Run Time** | 10 Hours |
| **Battery Operating Temperature** | 0 C° to 50 C° |
| **Battery Storage Temperature** | - 5C° to 70C° |

| BT250 Li-ion Battery Technical Specifications | |
|---|---|
| **Type** | Li-ion Rechargeable Battery - External Battery |
| **Output Voltage** | Li-ion 11.1 VDC |
| **Capacity** | Li-ion 27Wh |
| **Run Time** | 15 Hours |
| **Battery Operating Temperature** | 0 C° to 50 C° |
| **Battery Storage Temperature** | - 5C° to 70C° |

| Li-ion Battery Charger Technical Specifications | |
|---|---|
| **Operating Temperature** | 0 C° to 50 C° |
| **Storage Temperature** | - 30C° to 80C° |
| **Input Voltage** | 90 -> 250 VAC 50 -> 60 Hz |
| **USB Output Current** | 5 VDC / 2100 mA |

| Bag-1 Specifications | |
|---|---|
| **Total Weight** | 6600 g |
| **Bag weight (empty )** | 3600 g |
| **Bag dimensions** | 540mm x 235mm x 427 mm |

| Bag-2 Specifications | |
|---|---|
| **Total Weight** | 6470 g |
| **Bag weight (empty )** | 3780 g |
| **Bag dimensions** | 690mm x 252mm x 583 mm |

## Thanks For Choosing to Buy
# TITAN X13

GER DETECT

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