

 **I** FINDER

T5

Operator's Manual



T.5



● Contents

● Introduction	1
● Device presentation.....	2
● Device capabilities	5
● Turning ON/OFF the system.....	6
● How the keys operate?	7
● Device screen in exploration status.....	8
● Finding holes by T5	10
● Exploring principles	11
● Receiving frequency by the system and responding to metals (Coil 1×1).....	12
● Holding discus coil	13
● Table of depth	14
● Depth penetration of the coils.....	15

●Introduction :

Metal Detectors T5:

T5 is the newest pulse system of T.Finder Company and an evolution in case of pulse metal detectors (Pulse induction technology). It is one of the most sensitive and stable metal detectors in the world. T5 is the result of years of research and development in T.Finder Company. Many Efforts have been done that this new metal detector prepares facilities for “auto ground settings”. Pulse systems specially are suitable for searching in deep under ground. Performance of the system isn't often affected by saline soil of mineral lands or thermal changes. Designed military chips neutralize the signals reaches from the ground. Therefore, T5 is a reliable system for diagnostic precision metal objects and even in the worst state conditions of the ground.

T5 is the most different pulse metal detector in the world that has all parameters of a professional metal detector together.

● Device Presentation T5



Control Unit



20 Inches Coil



20 Inches Coil

● Device Presentation T5



Telescopic Handle with Carbon Fiber



1×1 Loop



2×2 Loop (You can purchase it)

● Device Presentation T5



Holder



1×1 Loop's Band , Ceraical Band, Screw



Headphones and Enarger

●Device Capabilities

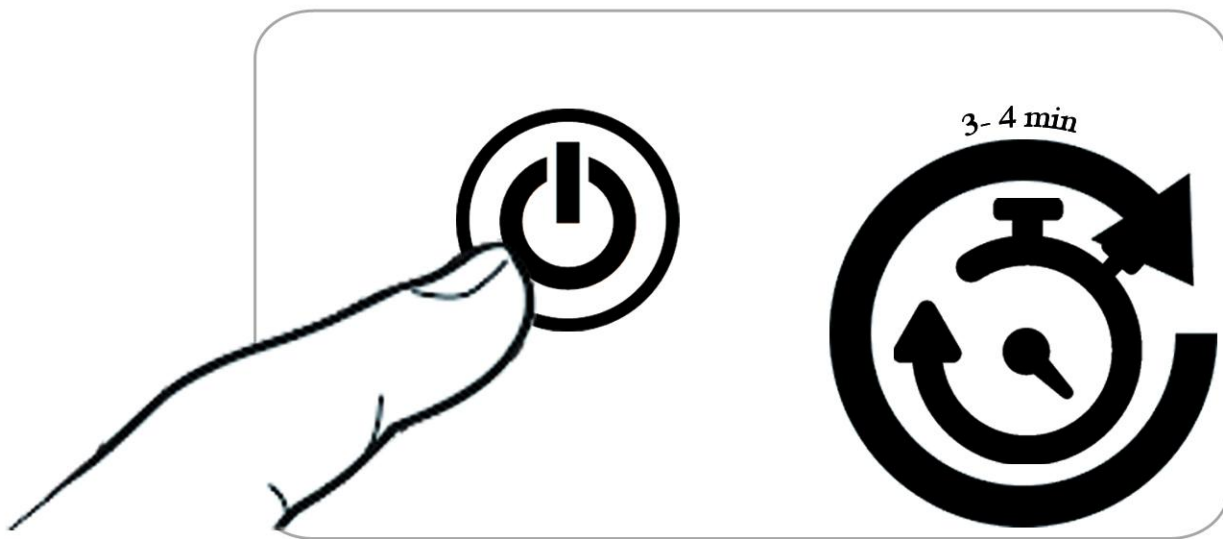
- Automatic adjustment with ground conditions (Auto Balance)
- “Delay” adjustment to eliminate the effects of the ground and reduce the sensitivity to clay.
- A digital filter to remove environmental noises (Noise filter).
- Preparing “City mode” to operate easily in cities and places which involve telecommunication waves.
- Acting in “All-metal” mode and “Analyze” mode simultaneously
- A digital meter in range of “-999 to +999”.
- The device matches itself with all weather conditions.
- 5 types of output sounds (Sound Type)
- Ability of adjusting contrast and LCD backlight
- Facility of finding holes

● Turn ON /OFF the System

To turn on the system, the coil must be connected to; otherwise the system will not start.

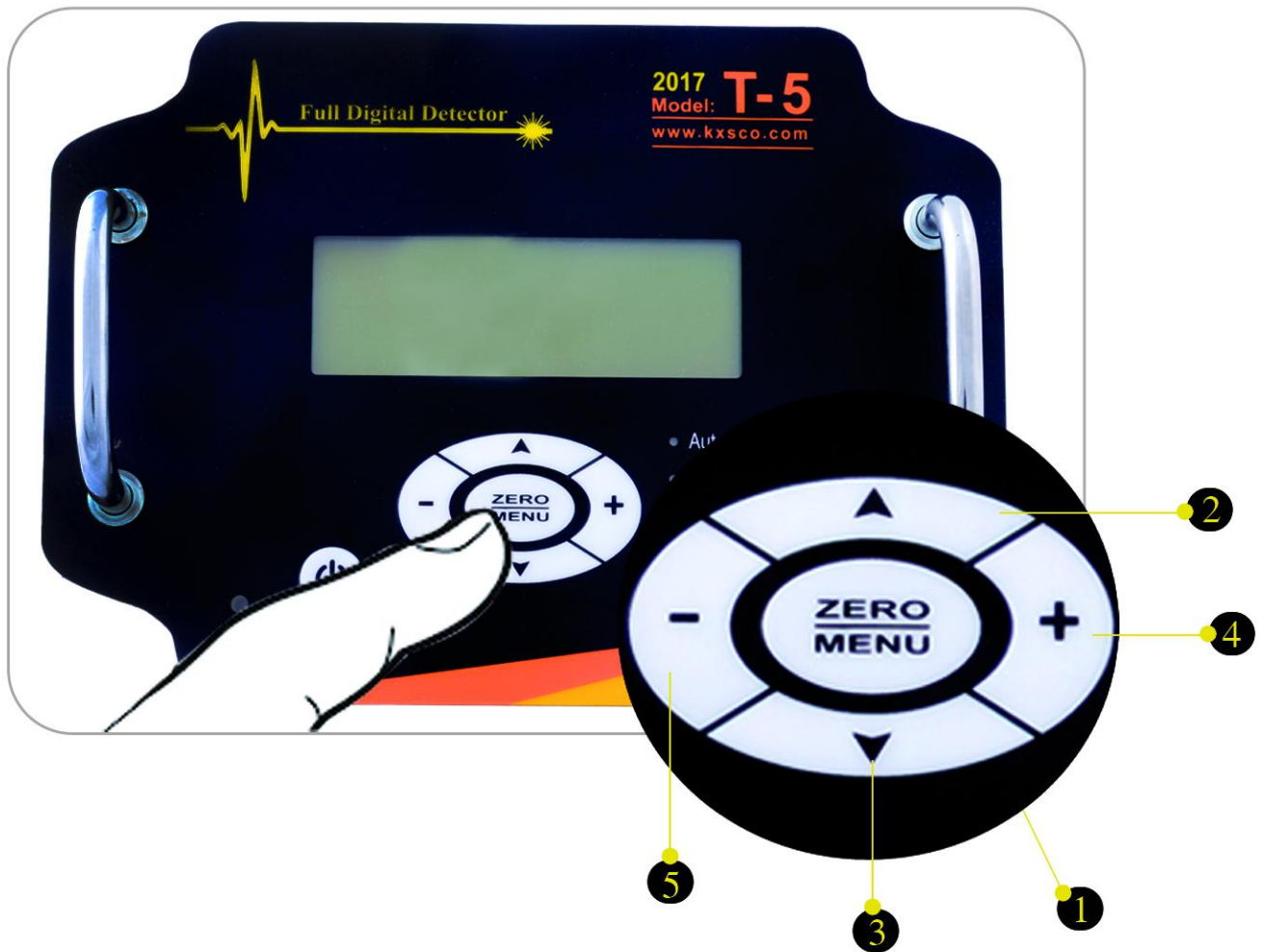
After connecting coil to the device press the power button and hold it for 2 seconds. Then to improve operating in tough conditions wait about 3 to 4 minutes until the system and processor chips to be warmed up and to adapt with environment temperature. Now the device is ready to use.

To turn off the system, press the power button and hold it for 2 seconds.



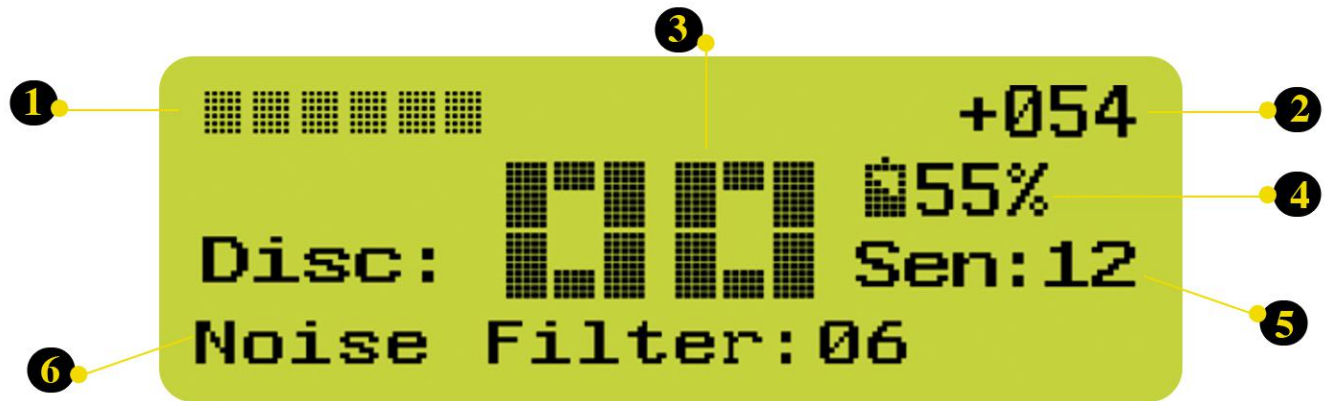
As long as the device is turn on, prevent disconnecting the coil cable.

●How the Keys Operate?



- 1 This 2 state touch key is used in 2 separate ways. If you press and free this key the system will be balanced (ZERO) and if you press it and hold it 2 seconds you will be entered to "Menu" settings .
- 2 To increase system sensitivity and select different parameter in "Menu"
- 3 To decrease system sensitivity and select
- 4 We use these keys in "Menu" for in creasing system parameters
- 5 We use these keys in "Menu" for in decreasing system parameters

● Device Screen in Exploration Status



- 1** Barograph about sensitivity of metal.
- 2** Digital meter indicates the exact amount of metal's sensitivity. This amount differs from -999 to +999. It can be used for pinpointing and identifying correct diagnosis balancing of device. This means that if the system has been balanced on a certain point of the ground and if after movement this meter has an amount less than -10 (for example -15) then you can know the balance point is not correct and you may have balanced the system on a metal. (This is so important. If you don't observe this matter, maybe you get depth reduction.) Note that during system balancing after it beeps, meter numbers shouldn't be less than -10 or more than +10.
- 3** The device has ability of separation and assigns each metal a unique ID. Each time the target is in range of separation the word "Disc" will blink on the screen and an ID will be displayed. Users can examine several different types of metals with device and to memorize the separation number. Note that some kinds of metals may have similar ID codes during the time and during chemical reactions.

● Device Screen in Exploration Status

Different metals codes have been shown in below table:

Metal Type	Metal Code
25/35	Gold . Coin
37/42	Bronze . Steel . Nickel Recycling
50/55	Ferrous metal objects . Nickel Recycling
60/65	Silver . Medium sized Bronze
76/92	Iron . Galvanized

- 4** The battery charging level is displayed. Note that for increasing battery life you can turn the system off and recharge it when the charging has lowered down to 20%. Charging the battery will take about 4 to 5 hours; this depends on how the charging level of the battery is low. When the battery is full, charger light will be green and will blink. A lithium battery has been used in this device. It is very light and the device would be turn on about 14 hours.

! Never connect charger to device as long as it is on.

- 5** The system sensitivity to metals is increased and decreased by this parameter and the range of this parameter is from 1 to 15. The amount of this parameter should be set in such a way that in exploration area, the device doesn't beep additionally.

! The difference in system range between each grade to next grade is not more than 2 to 3 percent, therefore even on degree of sensitivity 1, almost 50 percent of final system range will perform.

In this section of screen a summary of menu settings will be displayed and when the battery charge is less than 12 percent "Low Battery" message appears.

! When the device is balanced close to big metal objects "Balance Error" message will be displayed.

Finding Holes By T5

Sound Type: The Scope of Changes (0-5)

Types of sounds has been designed for this device that cause the operator 5 can detect the target better and easier

VCO output tones have been shown in the following table:

Tone Number	Output Frequency	Performance to metal sensitivity
1	305 Hz	Stable
2	601 Hz	Stable
3	1.2 KHz - 610 Hz	Stable
4	1.2 KHz - 610 KHz-305 Hz	Variable
5	1.2 KHz 400 Hz	Variable

LCD Backlight: The scope of Changes (0-5)

To increase or decrease LCD backlight

LCD Contrast: The scope of Changes (0-5)

To pale or bold LCD fonts

Detecting Holes

This device can be used to detect ancient holes with more than 20 years of lifetime. For this reason Delay and Auto Balance parameters must be 0 and city mode should be off that the device has had maximum sensitivity to ground. Now, you might balance the device and begin to move on. If you get to the point of the land that Meter shows a large negative value, then this point shows a hole. (Hole is a completely closed space in the ground, for example a grave)

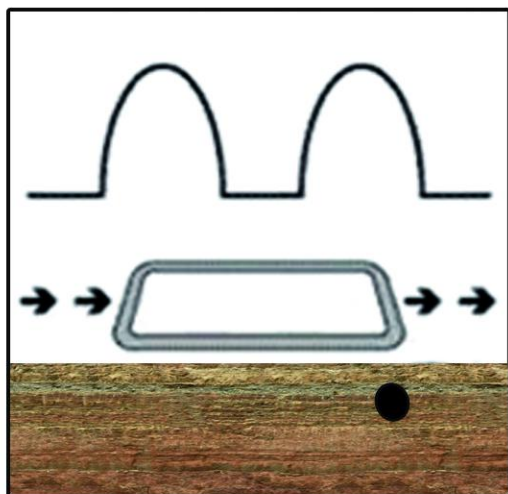
● Exploring Principles

1. Search coil wire must be tightened firm and spiral to probe that prevent additional beeps when you move on.
2. This is important that in scanning the ground with all metal detectors the distance and angle between coil and ground shouldn't be changed. So the operator must scan the area with the device so that the search coil should be parallel to ground and the distance should be 10-15 cm. Achieving maximum sensitivity and limit range of metal detector combined with acceptable stability depends on moving the loop into this way.

! Note that while balancing the system the operator shouldn't be close system's panel. Because your body's static electricity may effect on system's meter and may change it.



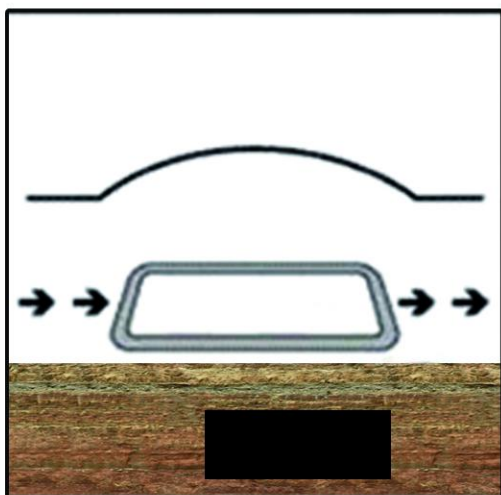
● Receiving Metal's Frequency by the System and Responding to it (Coil 1×1)



Picture 1

- If small size metal object has been buried underground, then 1×1 coil sideways show sensitivity as follows in figure 1.

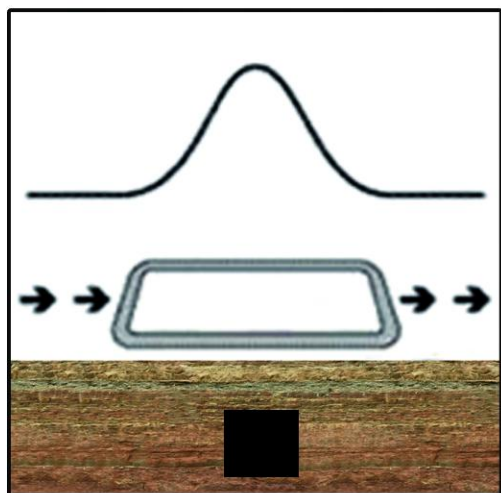
Small object near the surface



Picture 2

- If big size metal object has been buried underground, then sensitivity starts from beginning of the first sideways and will end at the end of the second sideways. (Figure 2)

Large object - Deeply buried



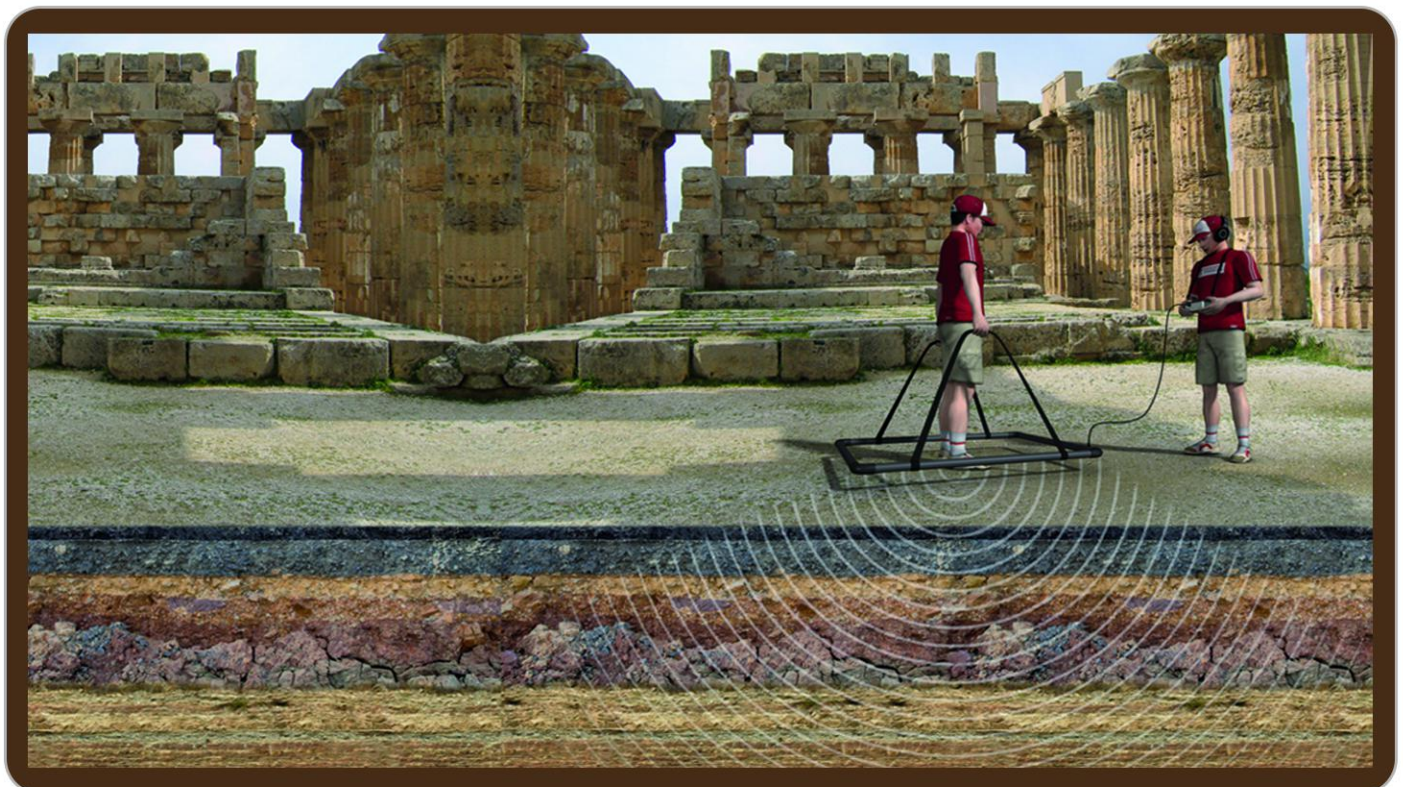
Picture 3

- If medium size metal object has been buried underground, then coil center shows sensitivity.

Medium sized object

● Holding Discus Coil

This device has 2 search coils. 50 cm discus search coil for 2 m effective depth and 1×1 flexible search coil for 4.5 m effective depth. Fexploring Table of depth shows you information about metal sense in different depths. This table has been tested for normal soil and average settings of T5 and in case of changing soil type and system menu. By operator these values may increase or decrease.

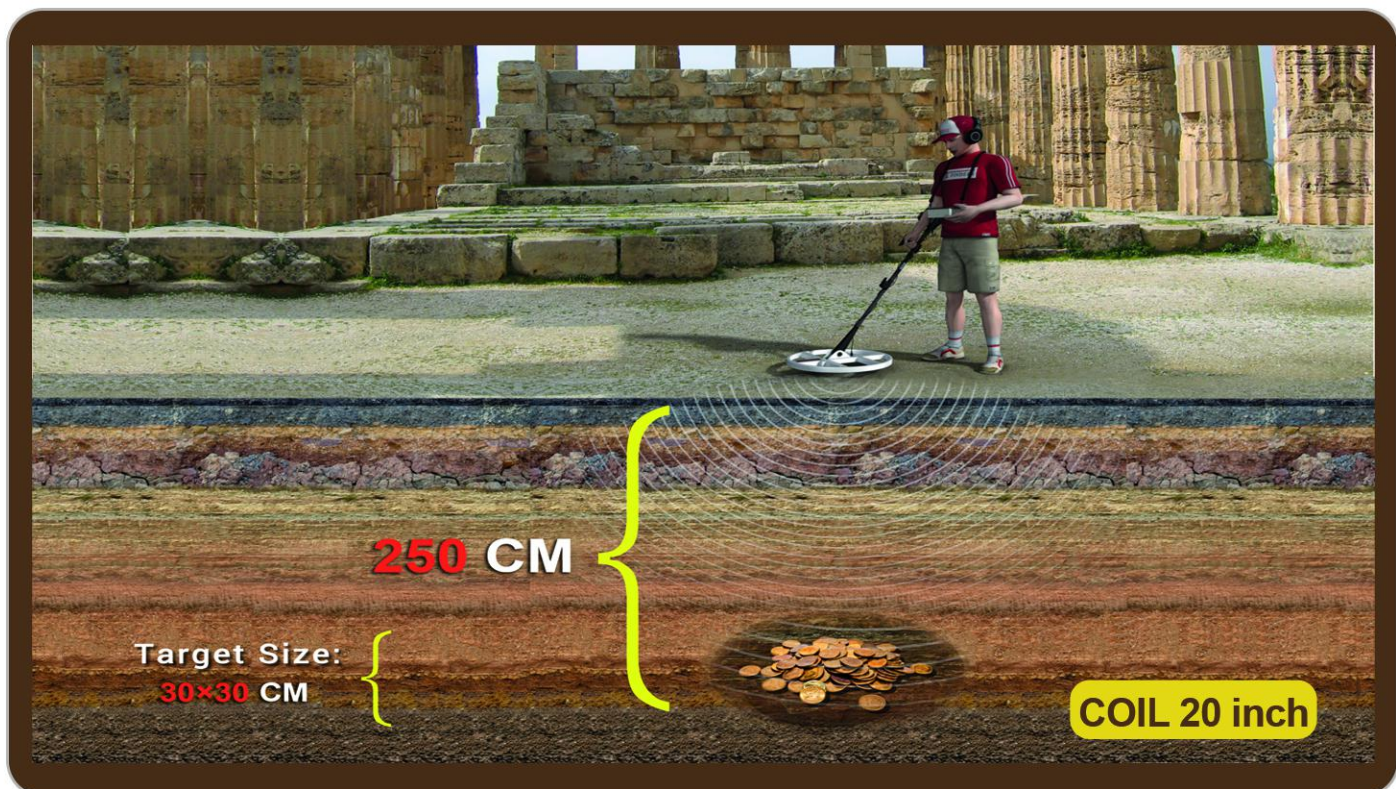
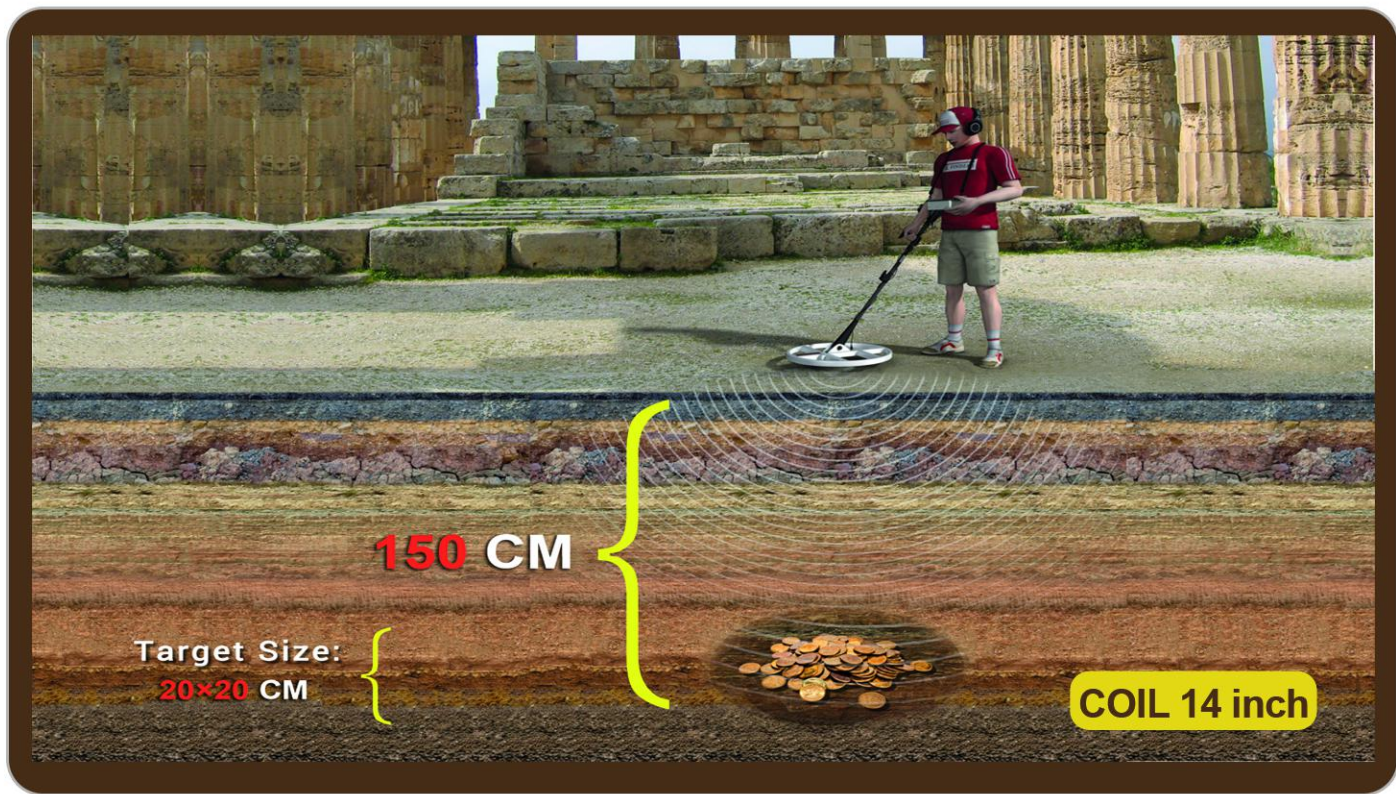


●Table of Depth

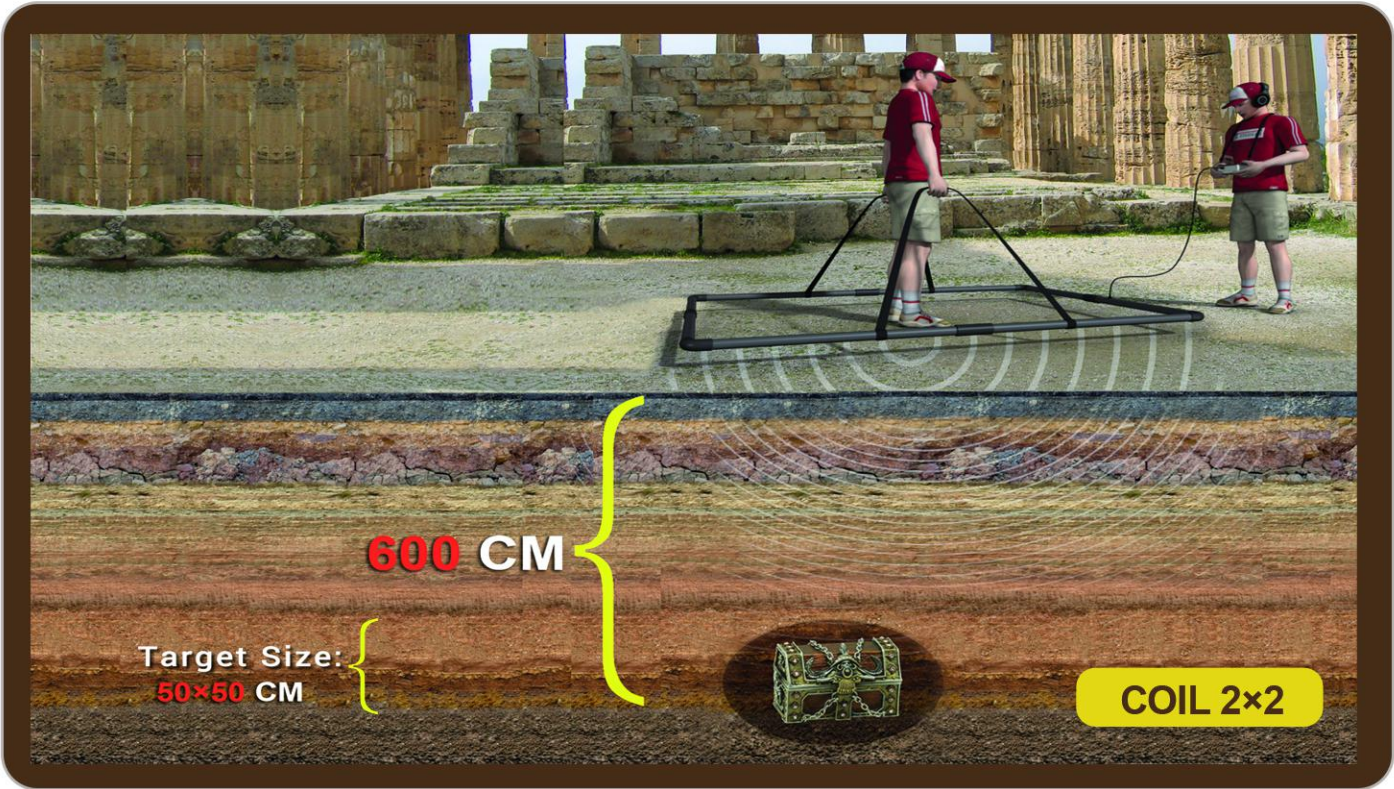
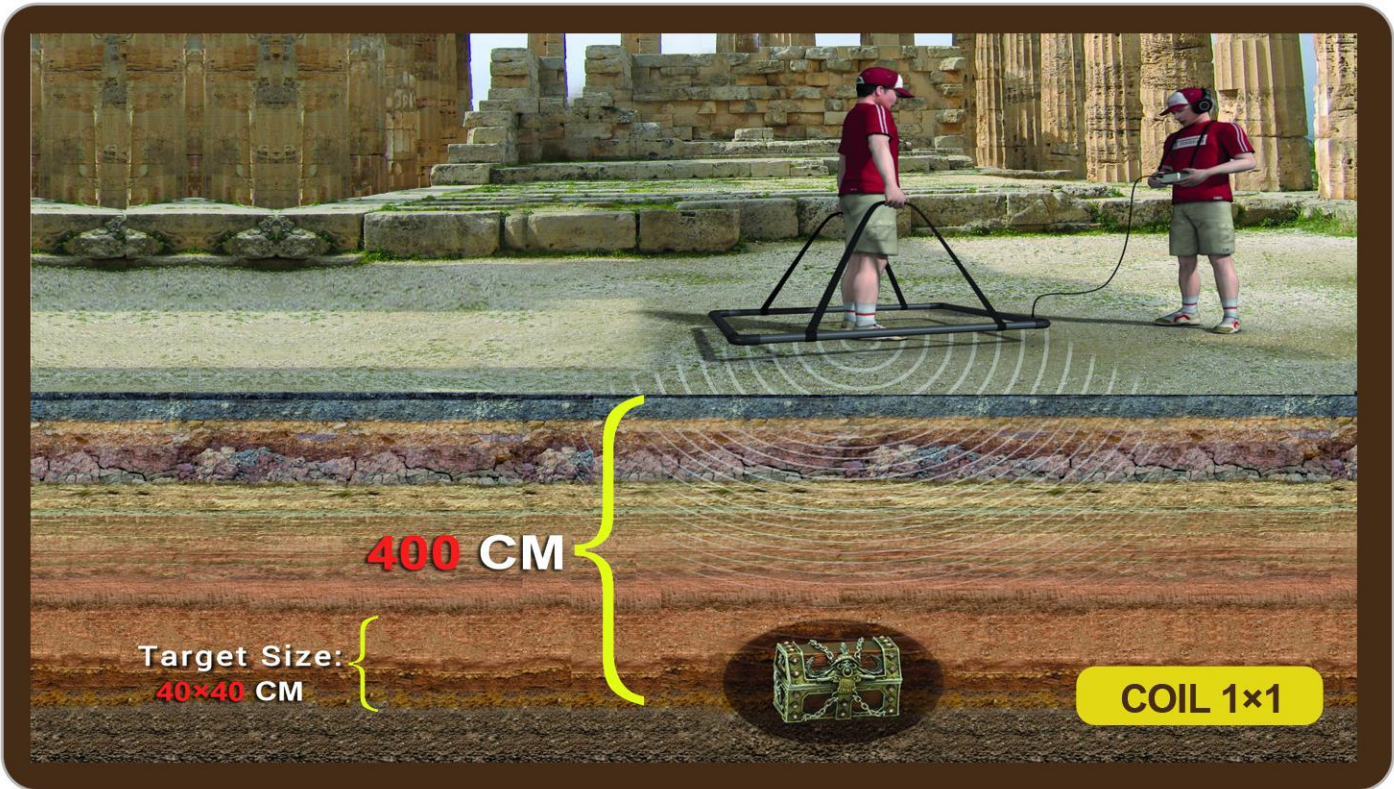
Dear user, pay attention that the dimensions have been shown in depth table are variable depends on metal's type. T5 system has been designed based on gold frequency. It means that closer metal frequency to gold frequency will sense higher. Table below shows the minimum and maximum depth.

(Size)cm	Depth (Coil 50 cm)	Depth (Coil 1×1)
20 cm	25-35 cm	2×2
35-50 cm	35-50 cm	5×5
80-110 cm	65-90 cm	10×10
200-280 cm	110-140 cm	20×20
240-270 cm	140-150 cm	30×30
280-350 cm	160-180 cm	40×40
330-400 cm	180-220 cm	50×50

• Penetration Depth of Coils



● Penetration Depth of Coils



● Note

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● Standard Pack for T5 Case

