

deephunter[®]

USER MANUAL



CAUTION!

READ CAREFULLY BEFORE USING THE DEVICE!

Metals with an alloy structure (such as lead, galvanized, etc.) which have remained under ground for a long time may deteriorate and on occasion produce a gold effect.

Positions of different metals under the ground effect the sensing of the device and cause it to misinterpret those objects as gold or precious.

- 1- This is a highly sophisticated electronic device. Do not attempt to assemble and operate the device before reading the Instructions Manual.
- 2- Do not start searching before determining the ground balance. Devices with poor ground balance will not produce accurate results.
- 3- Magnetic fields may interfere with this device. If you run in to this type of interference simply reduce your sensitivity and then continue detecting.
- 4- Protect the coil from possible impacts.
- 5- Do not expose coil to direct heat sources. Do not apply excessive force during assembly and use.
- 6- Align the battery and carefully place it in its slot in the proper direction. Do not force the battery in to the holder.
- 7- To obtain maximum performance, do not expose battery to excessive heat. Charge the battery at room temperature.
- 8- Do not apply force on the LCD display.
- 9- To prolong battery life, discharge it monthly by attaching it to the charging device. Always keep the battery in a charged state when storing the device.

CONTENTS

Parts and Accessories	1
Charging Battery	5
Assembly	5
Usage	7
Usage with Mode 1 (Visual System)	9
What Is Ground Balance.....	11
Mode 1: Adjusting Ground Balance.....	12
Mode 1: Search and Cavity Detection	14
Mode 1: Interpreting Oscilloscope Data	16
Mode 1: Eliminating Ferrous Metals	18
Mode 1: Target Analysis	18
Mode 1: Determination of Target Depth.....	19
Mode 1: Recording and Examining The Records.....	21
Usage With Mode 2 (Audio System)	22
Mode 2: Ground Balance	24
Mode 2: Search and Metal Detection	25
Technical Specifications	26

Thank You for Choosing Makro Detector.

PARTS and ACCESSORIES



Mode 1 - T44 Coil

36 x 44 cm (14.1 x 17.3 inches)

This is the coil used in searches for General Purpose. User monitors the results through the LCD display located on system box. This coil can only be used in Mode 1.



Mode 2 - C32 Coil & Coil Cover

26 x 32 cm (10.2 x 16.2 inches)

This coil is more effective in detecting single coins and smaller objects. All results of this system are monitored through an audio alert. This coil can only be used in Mode 2.



Mode 1 - T100 Coil & Coil Cover (Optional)

60 x 100 cm (23.6 x 39.3 inches)

This is a coil developed for deep searches and handled by two persons. A separate control box and a carry bag are available for this coil. This system operates only in Mode 1. When sensitivity is adjusted to 6 and lower levels, it will be possible to make comfortable searches without any interference from mineral structures and small metals without any need for ground adjustment.



Mode 2 - C47 Coil (Optional)

39 x 47 cm (15.3 x 18.5 inches)

This is the largest and deepest coil designed for use in Mode 2. All results of mode 2 are monitored through an audio alert only. This coil can only be used in Mode 2.

PARTS and ACCESSORIES



Electronic System Unit

This is the main control box. On this device you will find the coil connection, headphone jack, handset feed inlet and battery connection. Target results are evaluated and presented to user on the large color LCD Display.

In addition, the control box is equipped with an apparatus for easy handling.

Lithium Polymer Rechargeable Battery



Battery Charger



Vehicle Charger



Fittings



Extension Tube



Headphones



Handset Patch Cable



Carry Vest



Leather Carry Bag for System Box



System Carry Bag



Deep Coil Carry Bag (Optional)



PARTS and ACCESSORIES

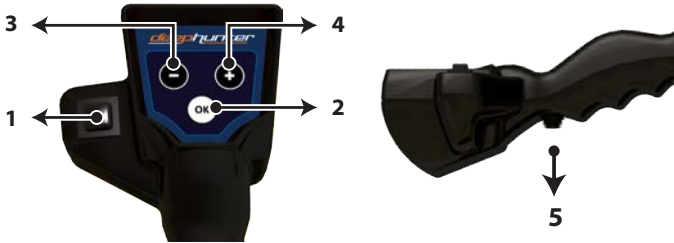
SYSTEM (CONTROL) UNIT



- 1- **ON/OFF BUTTON:** This Control is used for turning the device On and Off. It will also determine which mode the device will operate in.
- 2- **MENU:** This is the Control for switching to the Settings Menu in Mode 1.
- 3- **GROUND:** This is the Control for switching to Ground Balance Menu in Mode 1.
- 4- **RECORD:** This is the Control for entering the record screen. This is accessed from the menu and used for recording the target Analysis report in Mode 1.
- 5- **DEPTH:** This is the Control to switch to the Depth section in Mode 1. This is used for depth analysis.
- 6- **SENSITIVITY:** This is the Control used for adjusting the sensitivity in Mode 2.
- 7- **GROUND SETTING:** This is the adjustment for entering the ground balance in Mode 2.
- 8- **FERROUS and MINERAL SETTING:** This is the Control for elimination of ferrous metals and enabling search for highly mineralized grounds in Mode 2.
- 9- **FERROUS DISCRIMINATION:** This is the Control for discriminating ferrous metals with different sound alerts in Mode 2.
- 10- **SCREEN:** This is the visual display where data is presented to the user in Mode 1.

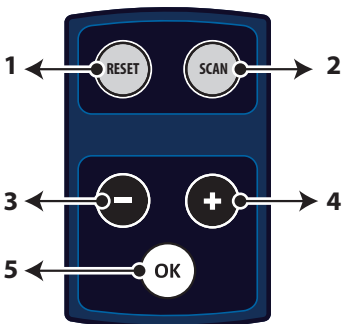
PARTS and ACCESSORIES

HANDSET



- 1- **SCAN:** This is the control for enabling the analysis of the target. This should be pressed while sweeping the coil over the target to be scanned.
- 2- **OK:** This is the control for confirming the current function and switching to the upper menu.
- 3- **"-"** : Dash Button.
- 4- **"+"** : Plus Button.
- 5- **RESET:** This is the Control that enables the device to return to the most stable (accurate) operating settings.

CONTROL BOX for DEEP SEARCH COIL

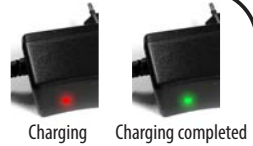


- 1- **RESET:** This is the Control that enables the device to return to the most stable (accurate) operating settings.
- 2- **SCAN:** This is the Control for enabling the analysis of the target. This should be pressed while sweeping the coil over the target to be scanned.
- 3- **"-"** : Dash Button.
- 4- **"+"** : Plus Button.
- 5- **OK:** This is the Control for confirming the current function and switching to the upper menu.

Note: Reset key is a significant key, frequently needed to be used during searches. This key enables clearing of erroneous signals and data and helps obtaining correct ones. Frequent use of Reset key would eliminate erroneous incoming signals.

CHARGING BATTERY

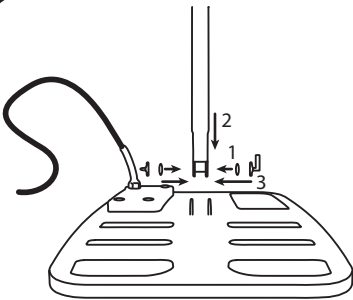
Remove the battery from system box and connect it to the battery charging device. The light on charger will be red during charging and turn to green when charging is completed. The light will be green if no battery is inserted in to the charger or if the battery is fully charged.



The charging time for a completely empty battery is approximately 7 hours.

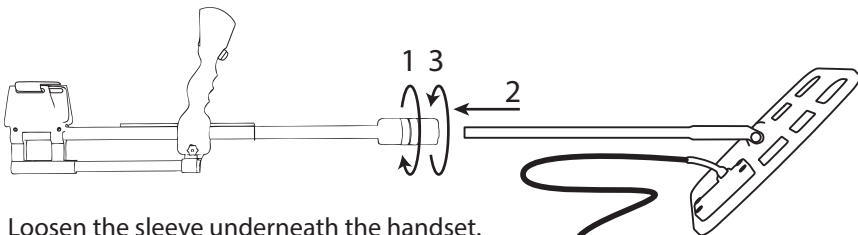
WARNING: When storing the device, remove the batteries from the detector and the charger. For the best results, batteries should always be kept in a fully charged state. Batteries should not be stored in excessively cold places such as refrigerators or freezers. The battery should be stored in a dry place and at room temperature. Batteries should be charged on a fire resistant surface. The device should only be charged with the approved charger. Overcharging or charging at the wrong voltage will subject the battery to the risk of fire. The risk of charging at over currents and at extremely high temperatures should not be overlooked.

ASSEMBLY



- 1- Insert seals into the slots at the end of extension tube.
- 2- Connect extension tube to the connection point on the coil.
- 3- Insert the screw through the hole on the coil and tighten at the opposite end with a nut.

1

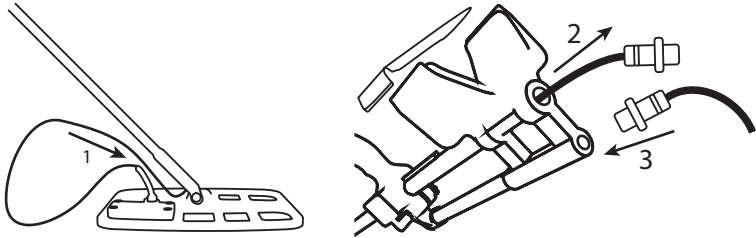


- 1- Loosen the sleeve underneath the handset.
- 2- Connect telescopic tube to the lower part of handset.
- 3- Tighten and fix the sleeve.

2

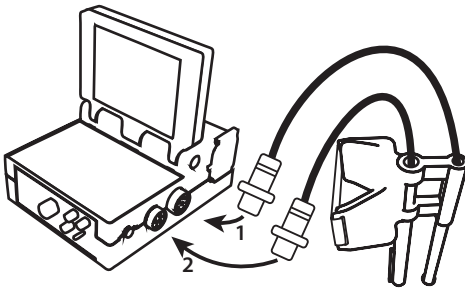
ASSEMBLY

3



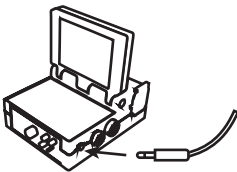
- 1- Pass the coil cable through telescopic tube.
- 2- Pull the cable out from the other end of the tube.
- 3- Connect the handset connection cable with 8 pins to the connection point at the rear of the armrest.

4



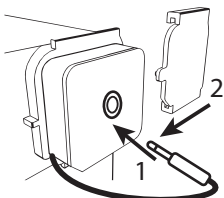
- 1- Connect the 9-pin terminal of the coil to the COIL connector and the 8-pin terminal of handset to HANDSET connection on the system box and tighten it.
- 2- Connect the deep coil control box to the HANDSET connection on the deep coil.

5



If you wish to use headphones, connect the headphone cable to the headphone connection on the system box.

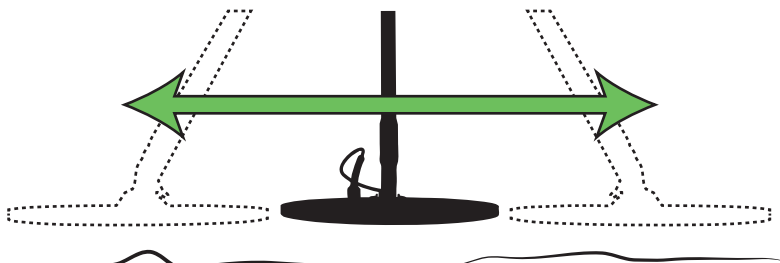
6



- 1- After inserting the battery, connect battery connection cable to the socket on the battery.
- 2- Close the cover by turning it in the direction of the arrow.

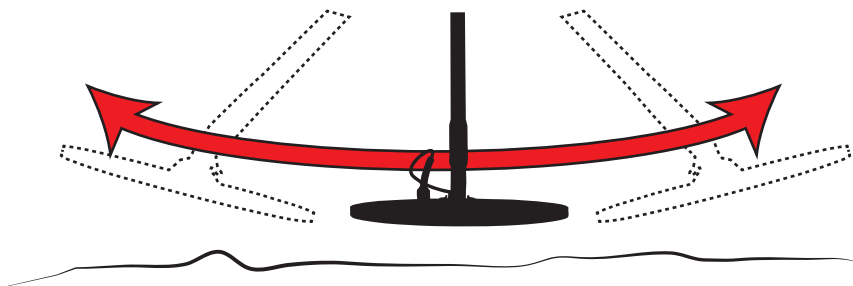
USAGE

RIGHT



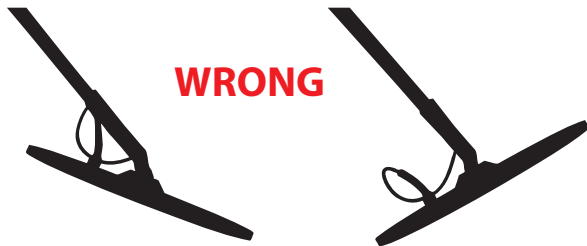
Ensure that coil always remains parallel to the ground during searches.

WRONG



Failing to keep the coil in a position parallel to the ground may cause faulty results.

WRONG

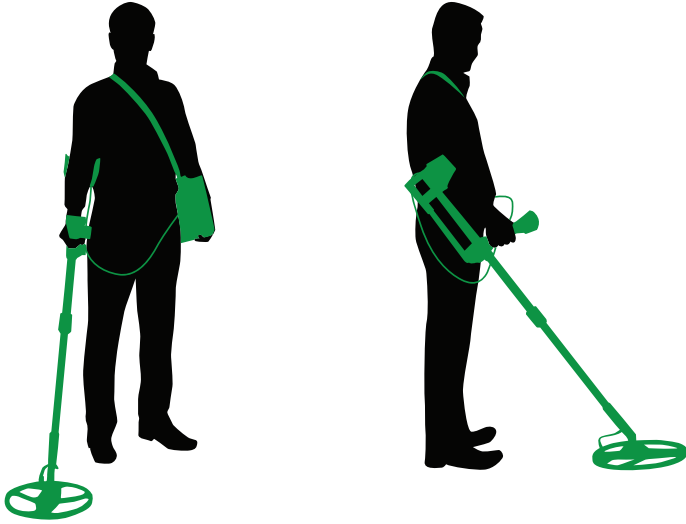


RIGHT

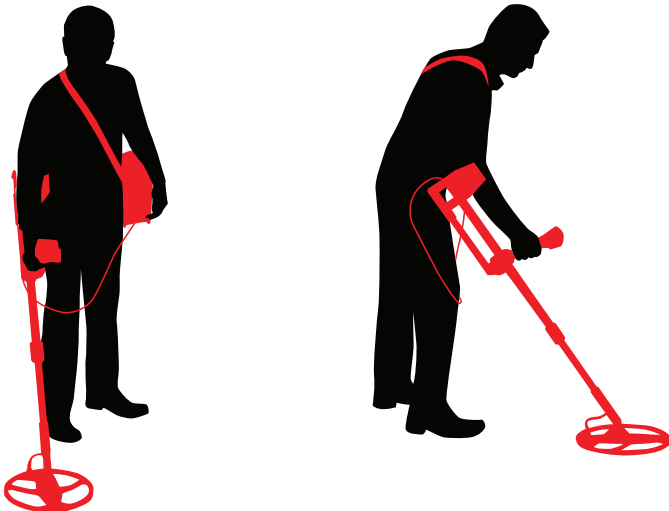


USAGE

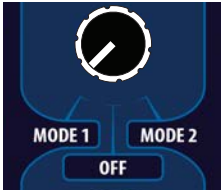
CORRECT HOLD



WRONG HOLD



USAGE with MODE 1 (VISUAL SYSTEM)



The device has two separate systems. These systems are called Mode 1 and Mode 2. Turn On/Off button to "Mode 1" position to operate the device with the screen system. Mode 1 is the operating mode in which the data obtained is presented to user with views and sounds. This mode is used for detection of larger targets at significant depth.

Mode 1 function of the device can be used only with either the 36x44 cm coil or the 60x100 cm coil attached.

Manual reset is available in this part, so there's no need to sweep the coil continuously. You can continue to receive signals from the target by holding the coil still over it.



User can make language selection by using "+" and "-" keys and pressing "OK" button after turning on the device.



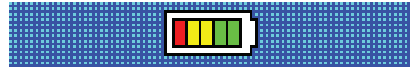
The Device automatically identifies the coil which is attached to it at the time when it is turned On. The coil attached will be shown on the screen. If a coil other than the appropriate one(s) is attached to the device, this will be indicated on the screen as "COIL FAILURE" warning. In addition, data regarding the battery status is also shown on the same screen.

In case of any existing failures in the coil or the system, "COIL FAILURE" and "SYSTEM FAILURE" lights will flash at the bottom of the display and warn the operator. If the warning continues, the user should contact the authorized service center.



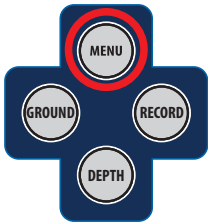
USAGE with MODE 1 (VISUAL SYSTEM)

Checking Battery Charge Status



The device will proceed to the “Ground Balance” section after identifying the attached coil. At the bottom of this section, there is a part indicating the battery status. The battery should be recharged as required.

Entering Settings Menu



Press the “MENU” button, no matter what section you are in, for adjusting device features such as sound, light, sensitivity and non-precious elimination. Current settings will be displayed under the respective section on the screen. Return to the previous menu by pressing “MENU” button after you make the adjustment of the desired selection.

VOLUME	LIGHT	SENSITIVITY	FERROUS
--------	-------	-------------	---------

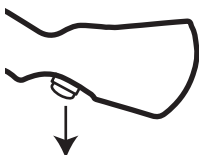
VOLUME	LIGHT	SENSITIVITY	FERROUS
--------	-------	-------------	---------

VOLUME	LIGHT	SENSITIVITY	FERROUS
--------	-------	-------------	---------

VOLUME	LIGHT	SENSITIVITY	FERROUS
--------	-------	-------------	---------

By pressing “+” and “-” keys, you will come to the desired area in the “SOUND”, “LIGHT”, “SENSITIVITY” or “FERROUS” sections, as shown above. After reaching the desired selection, press the “OK” button. The indicator bar will turn from yellow to green. Perform the desired adjustments by using the “+” and “-” keys and then press the “OK” button. The Green indicator will again turn to yellow. Now, your adjustments are saved. Repeat the same steps above to adjust other settings as desired.

CAUTION



Reset Button

Use of RESET Button: Some interferences arising from imbalanced motion of the coil and from the environment may occur while using the device. Such interference is shown on the device display and can cause the device to produce an audio signal. Reset the device by pressing the “RESET” button located under the handset. The Impact of this interference is eliminated through resetting the device in this fashion. You should not reset the device while coil is over the target! This will cause loss of depth, the wrong interpretation of the incoming signal and will prevent the device from detecting the target. Resetting is done only after the coil is moved away from the target.

WHAT IS GROUND BALANCE

Land conditions and soil structures may vary between regions (such as sandy soil, highly mineralized red soil, rocks etc.). In some places, the soil structure even within the same region may often differ.

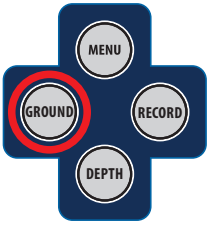
Such variances in soil structures mislead the detector and cause the device to sense this change as a metal object or cavity. For this reason, you should first introduce the soil structure data of the region to be searched to the device. This definition will block all potential misleading effects from the ground within that region; which would otherwise be sensed as misleading signals from the soil. These will be eliminated through proper setting of the ground control.

A proper ground balance is one of the most important prerequisites for a productive search. Therefore, it is important that the user pay close attention to variances within the soil. If you notice misleading signals are being detected by the device from changes in the soil structure, you will need to adjust the ground balance again.

Ground balance is done to enable the device to “sample” the soil structure so that it can balance out the mineral effect. By adjusting this setting in this fashion, the device will not be affected by different soil structures being reflected as metal or cavities. If the ground balance is not done properly, this will cause loss of depth and false signals from minerals being interpreted as metals or cavities. Therefore, the ground balance must be performed as accurately as possible.

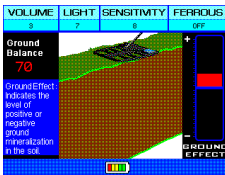
With highly mineralized land conditions in mind, the device uses a special ground balance system to ensure that it can work efficiently in such challenging conditions.

MODE 1: ADJUSTING GROUND BALANCE



After the device is turned On, the “GROUND BALANCE” section will appear automatically. You should first check your SENSITIVITY adjustment to be able to obtain accurate results. The Sensitivity level recommended for new users is 8. When you reach soil structures with varying ground effects during your search and when you need to renew your ground balance, switch to the Ground section by pressing the “GROUND” button. You should periodically check and readjust your ground balance as necessary.

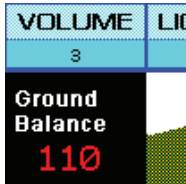
1



For adjusting Ground Balance;

Turn the On/Off button to the Mode 1 position. When the device is On, the Ground Balance screen will appear automatically.

2



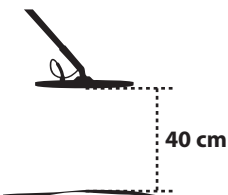
When you enter the Ground Balance menu the current setting stage is displayed on the screen as “Ground Balance”.

This value will be between -201 and +201.

3

If you run in to a location where you are not able to adjust the Ground Balance this is caused by one of two situations. 1. You have located a target OR 2. There exists a mineral structure in the ground that is not suitable for your sensitivity level. In this case, you should change your position elsewhere from the point which does not allow such adjustment and retry readjusting the Ground Balance; if still unsuccessful, the sensitivity level should be reduced by 1 increment.

4

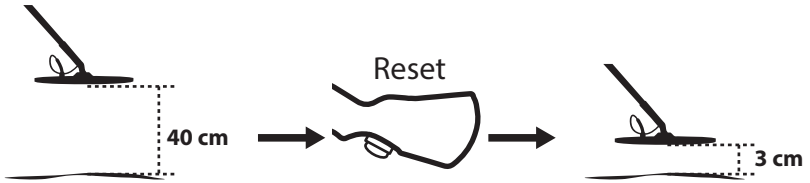


First, raise the coil approximately 40 cm above the ground (around your knee level) at the original position and press the RESET button.

Note: If you fail to raise the coil 40 cm above and begin by pressing the RESET, no operation to be performed afterwards will be accurate.

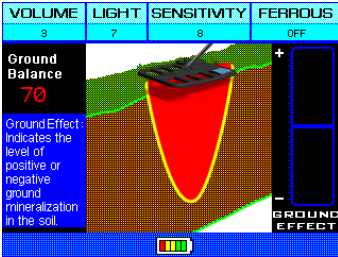
MODE 1: ADJUSTING GROUND BALANCE

5



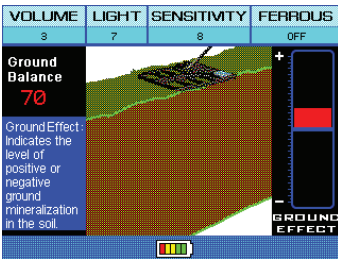
Raise the coil 40 cm above the ground. Now, keeping the coil parallel to the ground, press the reset button and lower the coil to 3 cm.

6



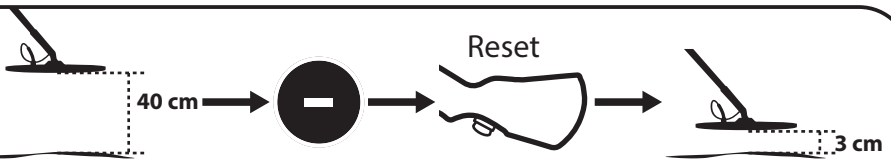
If there is ground effect on device, this effect will be seen on the "GROUND EFFECT" bars as shown in the figure. In this case, the device is ready for search. Simply press the OK button to switch to the Search section.

7



If there is ground impacting the device, this effect will be shown as "GROUND EFFECT" on the bars as shown in the figure. To remove this effect, press "-" key for "-" effects and "+" key for "+" effects. Repeat the steps 8-10 until this effect is removed.

8



If the device receives "-" effects, raise the coil 40 cm and press "-" key; if the effect is "+", press "+" key for a while and then press the RESET button and lower the coil to the ground holding it at a distance of 3 cm above the ground. Repeat this process until the effect is completely removed (until the signal on device disappears).

MODE 1: ADJUSTING GROUND BALANCE

- 9 In the case that the ground effect cannot be removed, reduce Sensitivity Level by 1 increment and repeat the above process.

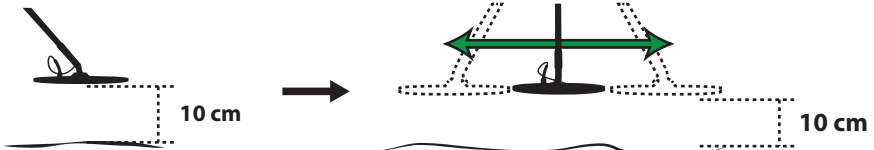
10



After the effect is completely removed, press the OK button as the coil is lowered down to 10 cm. Now switch to the search mode and start searching.

MODE 1: SEARCH AND CAVITY DETECTION

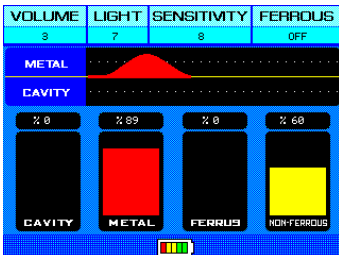
1



Hold the coil at a distance of 10 cm from the ground. Be sure that the coil is parallel to the ground. Sweep the coil with slow motions from left to right for accurate target detection.

Be sure that you keep your search coil within 3-40 cm at all times. This will maintain the proper Ground Balance. If you exceed these limits, you will receive false signals.

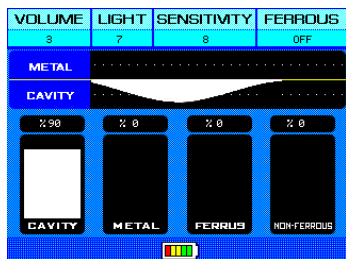
2



The device will produce an audio signal when it detects metal or a cavity. A signal will be produced from the following items: CAVITIES, METAL, FERROUS or PRECIOUS bars. The effect of the target can be monitored consecutively on the graph (Oscilloscope) located above these bars. In this graph, an ascending graph would be obtained for metal targets and a descending one for targets like cavities or voids.

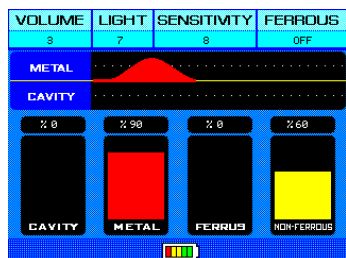
MODE 1: SEARCH AND CAVITY DETECTION

3



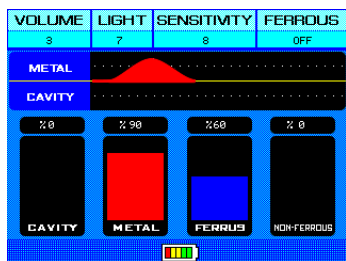
If the target is a cavity, an inclination on the "CAVITY" bar and a descending graph on the graphic display will be shown. The strength of the "CAVITY" bar would be shown numerically at the top, depending on the target's depth of effect.

4



If the target is a precious metal, an inclination is expressed numerically, depending on the depth of effect. This will be shown on both the "METAL" and the "PRECIOUS" bars. Metal effect can also be monitored in the graph located above the bars.

5



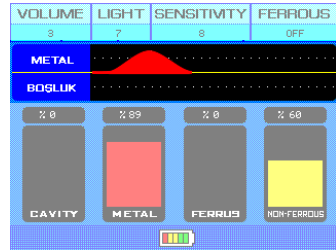
If the target is a ferrous metal, an inclination expressed numerically, depending on the depth of effect, would be observed both on the "METAL" and the "FERROUS" bars.

6

When you receive a warning from the device at any point, take the device away from that point and reset it. Next sweep the coil over the same point again. This is done to confirm the presence of a target.

INTERPRETING OSCILLOSCOPE DATA

The Oscilloscope is the portion of the screen where signals received by the device. These signals are displayed at the top of the search screen. Viewing this data provides you with a real time interpretation of the signals from the ground and the targets below.

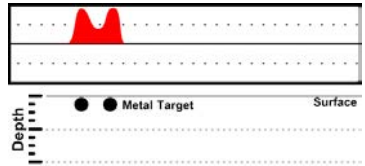


1



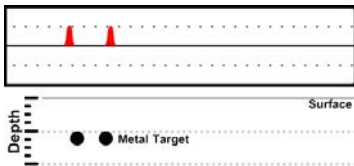
If the target is one small piece of metal and close to surface,

2



If the target is two small pieces of metal and close to surface,

3



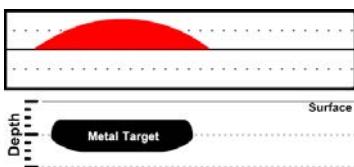
If the target is two small pieces of metal and at a slightly deep level,

4



If the target is one large piece of metal and close to the surface,

5



If the target is one large piece of metal and at a slightly deep level,

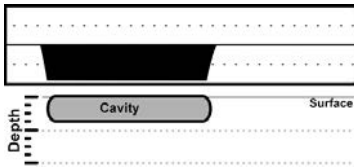
6



If the target is one large piece of metal and at a very deep level,

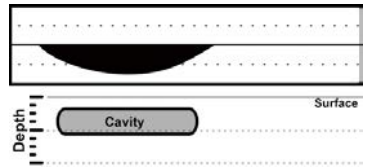
INTERPRETING OSCILLOSCOPE DATA

7



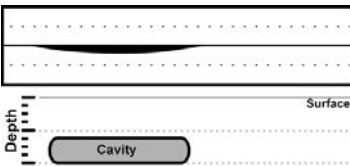
If the target is a cavity quite close to surface,

8



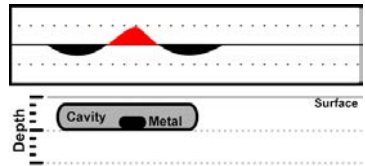
If the target is a cavity quite deep from surface,

9



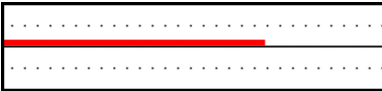
If the target is a cavity and very deep from surface,

10

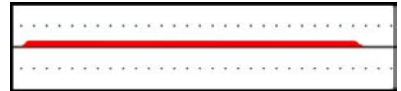


If the target is a piece of metal within a cavity,

11



If the Oscilloscope continuously shows a straight line; we can understand from the incoming signal that the ground structure is very highly mineralized. Therefore, the device would require a readjustment of the Ground Balance for the ground in that specific area.

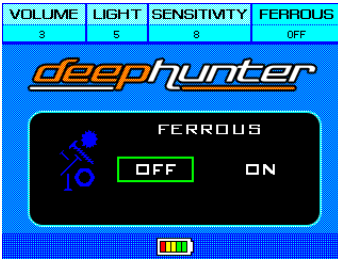


If the signal lines rise vertically and descend likewise, there is no need to obtain the depth for this target. The reason is that the target is very close to the surface. The depth measurement obtained would not be accurate.

When real targets are located, the signal on the oscilloscope would not continue linearly, they will always create a curve on the oscilloscope.

The closer the target is to the surface, the further the oscilloscope will show it from the central line and vice versa.

MODE 1: ELIMINATING FERROUS METALS



If the user desires, the device can be adjusted to eliminate ferrous metals and not report them to the user. To use this feature the FERROUS setting must be disabled.

To disable this section, press the MENU button in the Search and Ground sections. Press "+" key to enter the FERROUS section and then press the OK button. The screen will turn from yellow into green and you will see OFF. Now press the OK button again. Next press

the MENU button again to return to the previous section.

The device will eliminate ferrous metals after this operation. To enable detection of ferrous metals again, repeat above steps to bring the frame to ON position.

TARGET ANALYSIS

To obtain the analysis of a target detected during search:

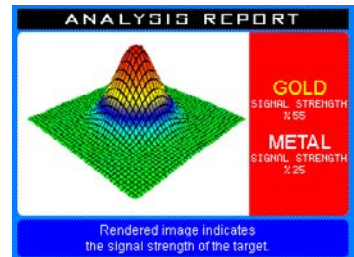
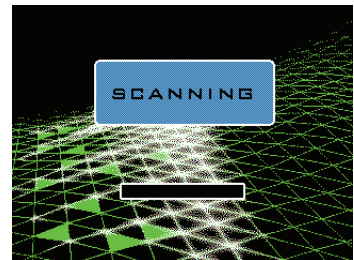
Remove the coil from the target after it is detected and then press the RESET button.

Press and hold the SCAN key while slowly sweeping the coil over the target again. Meanwhile, the device will analyze the target. After leaving the area above the target, release the SCAN key.

Then, the device will present an ANALYSIS REPORT to the user. In this report, the type of metal and the effect of the target reflected on the surface are obtained.

Press "RECORD" key if you wish to save this report, a message indicating the saving is completed will appear on the screen.

To exit this screen, press OK or the RESET button.



DETERMINATION OF TARGET DEPTH

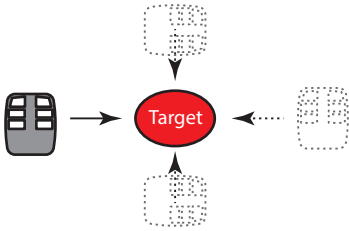
To determine the depth of a target detected during search:

1



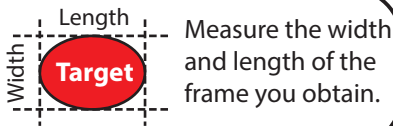
User should first determine the dimensions of the target as reflected to the surface. For this, bring the coil towards the target by using the coil's side; the front and rear parts of the coil are not used during this measurement.

2



To determine the diameter of the target, mark the first points at which you receive a signal in four directions.

3



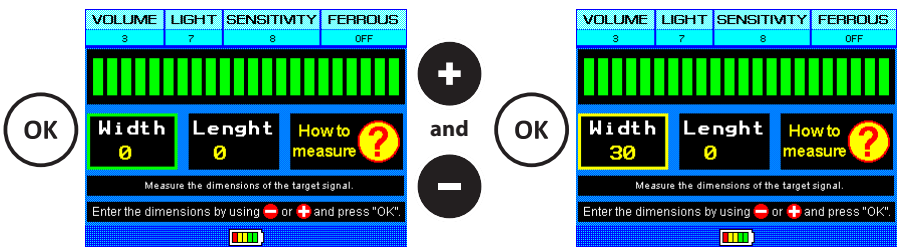
Measure the width and length of the frame you obtain.

4

DEPTH

After determining the effect of the target reflected to the surface, press the DEPTH key.

5



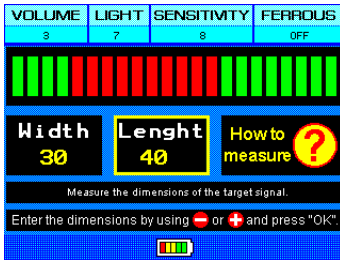
To enter the determined width value, bring the yellow frame to "Width" by using "+" and "-" keys. Press OK button to ensure the frame is turned into green. Enter the determined value by using "+" and "-" keys and press "OK" button.

DETERMINATION OF TARGET DEPTH

6

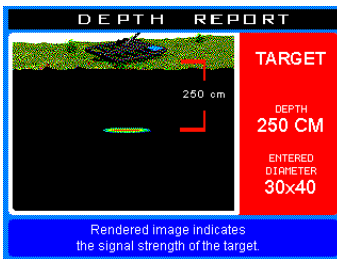
Maximum value that can be entered for width and length is 160 cm. If measured values exceed 160 cm, enter 160 cm into the respective field and perform a depth scan.

7



After entering these values, press and hold the SCAN button and sweep the coil over the target, release the SCAN button after the signal disappears.

8



At the end of these processes, a Depth Report showing the depth and measurement values entered will be obtained. The value obtained is an approximate one.

Press the "RECORD" key if you wish to save this report, a message indicating the saving is completed will appear on the screen.

Press the OK button or the "Reset" trigger to exit this report.

The device will return back to the Depth mode; you can switch to the Search mode by pressing the DEPTH button.

RECORDING AND EXAMINING THE RECORDS

To save the Reports obtained:

RECORD

After obtaining the Analysis and Depth Reports, press the RECORD button to save the Analysis Report.

OK

Press OK button after a the completed message appears on the screen to indicate that the information has been saved.

A maximum of 20 records can be saved on the device.

To retrieve a saved record for review at a later time:

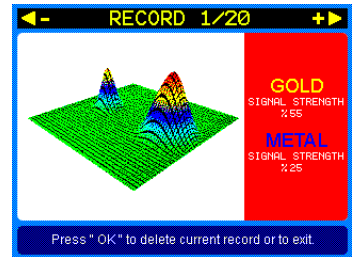
RECORD

Enter the Recording menu by pressing the RECORD key in the search mode.

+

-

Records can be reviewed by using the "+" and the "-" keys.



To delete records:

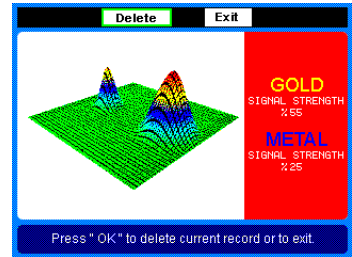
OK

Press the OK button while viewing the record that which you wish to delete.

+

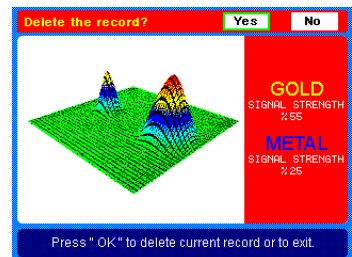
-

Use the "+" and the "-" keys to select Delete the Record and Exit the window on the left side of the screen.



OK

After pressing the OK button, scroll to EXIT for exiting the recording menu or scroll to DELETE RECORD to delete the record by using the "+" and the "-" keys.

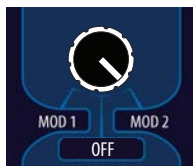


USAGE with MODE 2 (AUDIO SYSTEM)

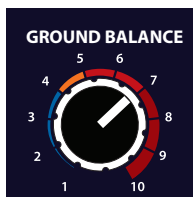
In Mode 2, target detection is performed with audio alerts only. This mode is recommended to be used for the detection of small objects and metals such as single coins.

This mode can be used only when Mode 2 compatible search coils are attached.

Since Mode 2 is a system running on the motion principal, the coil should be in continuous motion. Move the coil from left to right over the ground for metal detection.



Turn the On/Off button to the Mode 2 position. When the device is turned on, the opening sound will play. After approximately 10 seconds, the device will be ready to use with the active audio alert.



GROUND SETTING

This is the adjustment made to eliminate the interferences originating from the minerals within the ground. Ground Balance enables device to operate with a higher performance in different ground structures and prevents it from giving false signals due to the minerals within the soil.

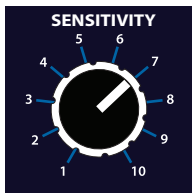


IRON DISCRIMINATION

This is the key that enables the discrimination of ferrous metals from precious ones based on different audio alerts. With the use of this key, the user is able to conduct searches in highly mineralized soils containing iron minerals (humid and plowed soils, soils containing high amounts of iron and places such as beaches etc.). As this key is turned from 1 towards 10, a loss of depth will be seen for some metals. As this key is turned towards 10, the ferrous discrimination of the device increases. The interval at which metals are detected the deepest is between 1 and 3. Metals are detected with a single audio tone. Above 4, metals are discriminated with audio tones; for ferrous metals a low tone and for precious metals and gold, two different but similar high tones will be produced.

Automatic (Auto): This is the setting where metals are discriminated as ferrous and precious. This setting is recommended for use where ground structures require. You can use this setting where metal discrimination is required but ferrous discrimination is not.

USAGE with MODE 2 (AUDIO SYSTEM)



SENSITIVITY ADJUSTMENT

This adjustment is used to reduce the interference the device receives from the surrounding environment due to electromagnetic waves and the effects from the ground. Moreover, this is the depth adjustment of the device. When the device is set to the maximum sensitivity, the depth is also maximized. However, as the sensitivity is increased, the sensitivity of device towards electromagnetic waves and ground effects will also increase. The user will have to reduce the sensitivity level to a point where the device is stable and produces a comfortable operation with minimal interferences from the environment.



IRON and MINERAL SETTINGS

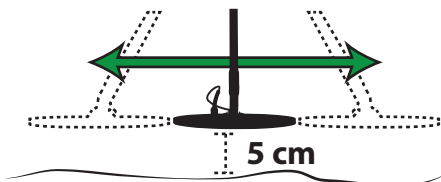
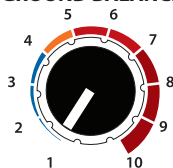
Iron On: If you wish to see ferrous metals during your search, use this mode. To enable ferrous metals to be detected with different sound tones, the ferrous discrimination key should be set to automatic or positioned between 5 and 10.

Iron Off: Conduct your search in this mode to prevent your device from producing signals for ferrous metals. The Ferrous discrimination key should be set tautomatic or positioned between 5 and 10 for searches conducted in this mode.

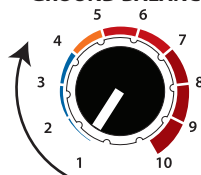
Beach & Mineral: Conduct your searches in highly mineralized soils or at beaches where you face difficulty in setting the ground balance. To conduct the search in this mode, the Ferrous Discrimination must be at position 10. In this position, the device will not be affected by the iron content or high levels of minerals contained within the ground. It will not produce signals for ferrous metals, however a reduction in metal detection depth will occur. If you continue to receive signals from highly mineralized ground, simply reduce the sensitivity level.

MODE 2: GROUND BALANCE

GROUND BALANCE



GROUND BALANCE



Bring the Ground Balance to position 1. Sweep the coil from left to right at 5 cm above the ground. If the device receives any interference, to remove it, increase the Ground Balance level in small increments while sweeping the coil at the same time. Leave the setting at the point where the sound goes off. Now, your Ground Balance is complete.

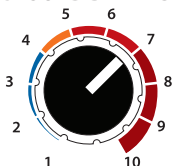
If the Ground Balance is still not matching at position 10, reduce the sensitivity level incrementally and repeat the above steps. If you still receive intense effects from the ground even when the sensitivity is reduced, then the soil may be rich in the mineral iron. In this case, try adjusting the Ground Balance again after bringing the Ferrous and Mineral Adjustment to Beach & Mineral and the Ferrous Adjustment to 10.

If your search area has a highly variable structure, adjusting Ground Balance at points where you receive the highest effects from the ground (such as over rocks or pits) would minimize the ground effect during your search.

NOTE: You may need to readjust the Sensitivity and Ground Balance when the effects from ground or environment vary.

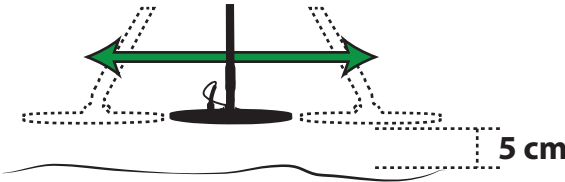
CAUTION

GROUND BALANCE

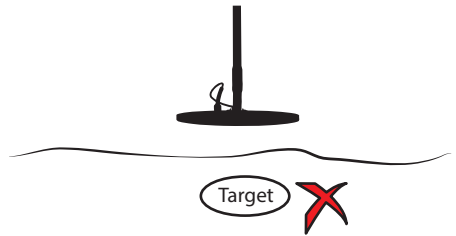
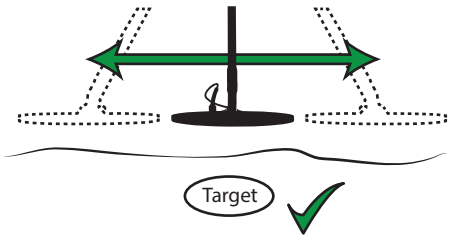


After Ground Balance passes to the red marked area, depth loss may occur for precious metals other than gold. When the Ground Balance is at position 10, the device will not sense ferrous and precious metals except gold. Therefore, if you are also searching for precious metals, you should keep the Ground Balance between the blue and orange areas. If the Ground Balance does not match within these areas, enable it to match by reducing the sensitivity level. The recommended Ground Balance level is 4-6.

MODE 2: SEARCH and METAL DETECTION

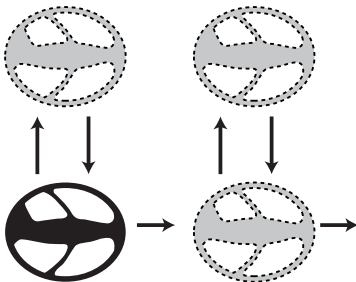


Hold the coil at a distance of 5 cm from the ground. Be sure that the coil is parallel to the ground. Sweep the coil with slow motions from left to right for accurate target detection.



Mode 2 is a system that operates under the motion principle. Therefore, the coil should be kept in constant motion to enable the device to detect metals. Since the device runs on an automatic reset principle, if you keep the coil still over the target, it will not detect the metal.

The Device will produce a sound alert when it detects metal. To check the target, sweep the coil over the same target several times to confirm that you receive the same signal.



You can detect metals which are hard to detect more easily if you sweep the coil from left to right in both directions over the area to be scanned.

TECHNICAL SPECIFICATIONS

	MODE 1 (VISUAL SYSTEM)	MODE 2 (AUDIO SYSTEM)
Operating System	VLF	VLF
Frequency	12.5 KHz	17.5 KHz
Metal Detection	Display and Sound	Sound
Sensitivity Adjustment	Manual	
Ground Balance	Manual	
Headphone Output	1/4" Stereo	

	System Unit	T44 Coil	T100 Coil (Optional)	C32 Coil	C47 Coil (Optional)	Stem
Dimensions	21x18x8,5 cm	36x44 cm	60x100 cm	26x32 cm	39x47 cm	85-135 cm
	8,2x7x3,3 inç	14x17,5 inç	23,5x40 inç	10x12,5 inç	15x18,5 inç	33-53 inç
Weight	1.380 gr	1.400 gr	6.450 gr	850 gr	1.200 gr	1.000 gr
	3 Pounds	3 Pounds	14.2 Pounds	1.85 Pounds	2.65 Pounds	2.2 Pounds

Battery	16.8 V 3300 mA Lithium Polymer, rechargeable
Operating Voltage	12 V - 16.8 V
Battery Charger	AC 100 - 240V / 50 - 60 Hz - DC 16.8 V / 500mA
Battery Weight	320 gr

Warranty Period is 2 years.

Note: Battery, bags, headphones and battery charger devices are not included in the warranty coverage.



MAKRO DETECTOR

info@makrodetector.com

www.makrodetector.com

DEALER

