USER GUIDE

CF77
COIN FINDER

2 YEARS WARRANTY

www.makrodetector.com

MAKRO
METAL DETECTORS

CAUTION!

PLEASE READ CAREFULLY BEFORE OPERATING THE DEVICE!

You have to follow local legislation and regulations while using the device. This device must not be used in military zones, residential areas and ruins. Related authorities must be informed about the historical and cultural findings encountered in searches.

1- This device must only be repaired by authorized service, the warranties of devices unpacked by the user or third parties are void.

2 - The device and coils should not be stored in extreme cold or hot environments for a long time. Suitable range of temperature is 0 to 45C.

3 - The device should not be installed or operated without reading the user manual.

4- Device and the accessories should not be submerged into water or stored in excess moisture, except for the coil.

5- The device should be protected against the impact that may occur in transport.

CONTENTS

Thank You for Choosing Makro Detektör.

SEARCH COILS

C28 Coil and Cover (Standard Pack)

28 cm (11")

Standard coil. Water resistant Double-D coil designed for surface and deep searches.

C23 Coil and Cover (Pro Pack)

23 cm (9")

Water resistant Double-D coil designed for surface and beach searches. The lightweight and compact design allows you to easily search tight spots.

This coil is used to detect small targets at or close to the surface. Good target separation makes it the perfect choice for searching areas that contain many targets in close proximity to one another.

C45 Coil and Cover (Pro Pack)

39 cm x 45 cm (16" x 18")

Water resistant Double-D coil designed for users requiring great depth. It provides better depth compared to the standard coil. This coil is perfect for covering larger areas such as fields and wide open areas.

PARTS and ACCESSORIES

System Unit and Armrest

S Tube

Extension Tube

Headphone

Coil Connection Parts

System Unit Connection Parts

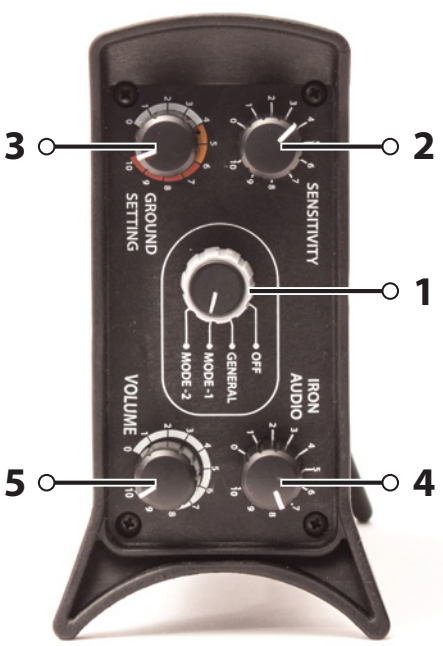
Battery Box

The device is delivered with 8 AA Alkaline batteries.

Battery Box Cover

Carrier Bag (Pro Pack)

SYSTEM (CONTROL) UNIT



1- On/Off and Mode Selection switch
2- Sensitivity
3- Ground Setting
4- Iron Audio
5- Volume

6- Coil Input
7- Battery Input
8- Headphone Input

BATTERY

Your device is delivered with AA Alkaline battery and battery box.

Place the batteries in the battery box paying close attention to the orientation of the + and – terminals.

AA Alkaline batteries are recommended for the best performance. You may also use good quality NiMH Rechargeable batteries. High mA batteries provide longer use compared to low mA batteries.

Fully charged alkaline batteries can last up to 30 hours. Other types and brands of batteries may differ in operating life.

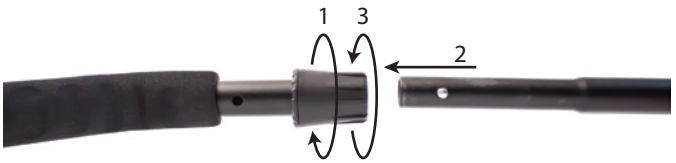
LOW BATTERY POWER

When battery is low, the device will sound and alarm approximately every minute. When this is heard, the device will operate for approximately 3-4 more hours.

ASSEMBLY

1

As shown in the picture, fasten the S-Tube by passing it through armrest and adjusting the length.



2

While holding the metal button on the upper tube, mount it on the S-Tube and tighten the sleeve by inserting the metal button in the socket.

3

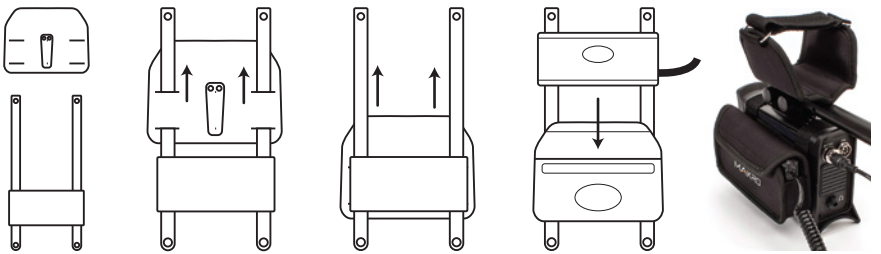
1- Insert the seals in the sockets at the end of the extension tube.
2- Insert the extension tube in the connection port on the coil.
3- Place the screw in the hole on the coil and tighten with a nut on the other side.

ASSEMBLY

4

Wind the coil wire as shown in the picture. Fasten and tighten the connector at the end of the wire to the coil input under the system box.

5



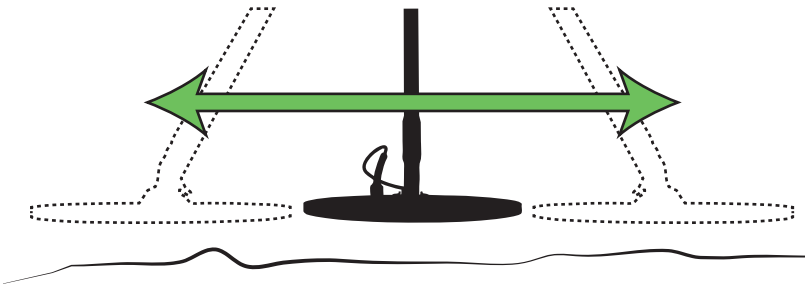
To use the battery mounted on the device, mount the straps to the cover in bottom-up direction as shown in the picture and then fasten the cover on the system box with the belts.

6

To use the battery in a body mounted fashion, remove the straps from the cover and fasten it to your belt. Plug the battery connector to the battery socket under the system box and then fasten by tightening.

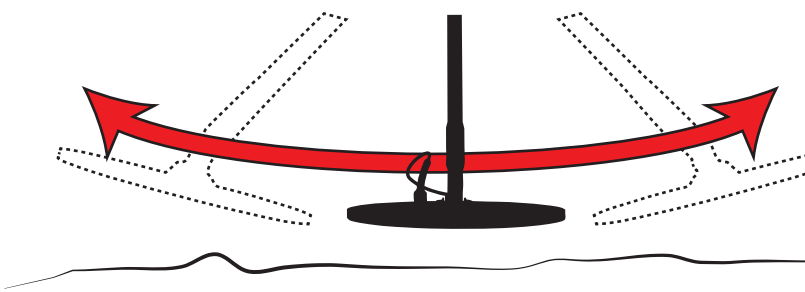
USAGE

RIGHT

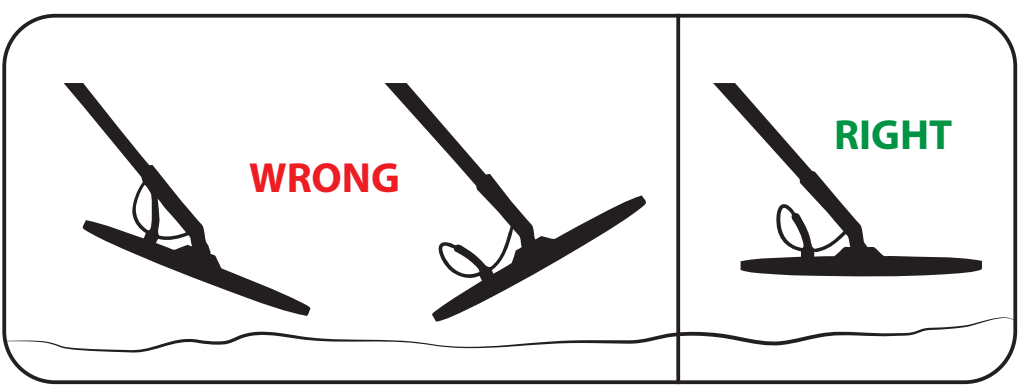


Ensure that the coi¬l always rema¬ins parallel to the ground duri¬ng searches.

WRONG

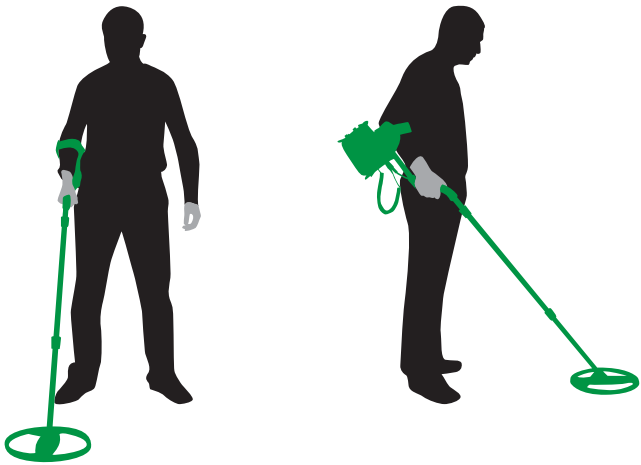


Failing to keep the coil in a position parallel
to the ground may cause faulty results.



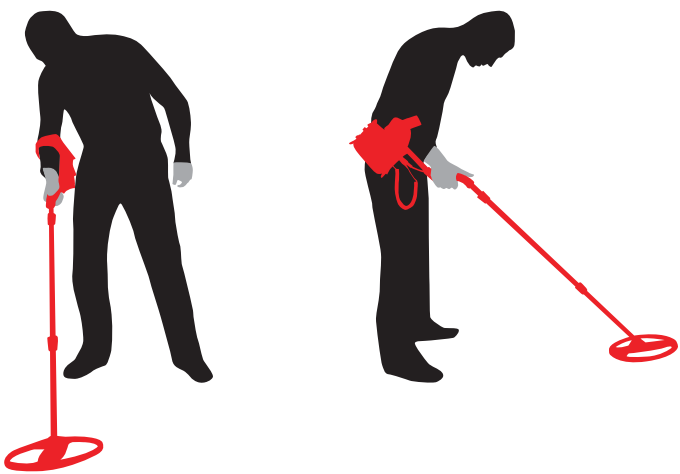
USAGE

CORRECT HOLD



Ensure that the coi¬l always rema¬ins parallel to the ground duri¬ng searches.

WRONG HOLD



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

SETTINGS

GENERAL: In this mode, the device searches at the maximum depth. This is an all metal mode that provides a single audio tone with no metal discrimination. The Iron Audio button is not active in this mode.
MODE 1: The device discriminates metals in this mode. (This mode provides deeper searches than MODE 2.) This mode produces 3 different audio tones in response to different metals. It provides 2 similar sounds for non-ferrous metals and gold and a deeper sound for ferrous metals.
MODE 2: In this mode, the device provides metal discrimination as well as providing the best operation on beaches and in areas rich in minerals. This is the recommended setting for the device when hunting areas rich in iron, minerals, beach conditions and fields where the ground setting is not possible.

GROUND SETTING
This is a setting done to eliminate noise and interference caused by minerals in the ground. Ground setting provides the device with a higher performance and prevents it from transmitting false signals caused by minerals in the ground.

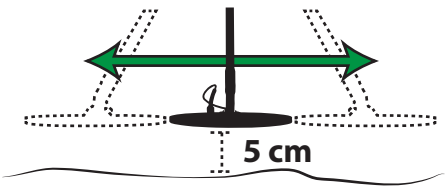
SENSITIVITY
Sensitivity setting is made to prevent noise from the ground or false signal sounds caused by some electromagnetic interference (electrical machines, radar, radio, TV, electric lines etc.) in the environment. The sensitivity setting is also the depth setting. When sensitivity is set to be at the maximum level, the depth will increase to the maximum as well.

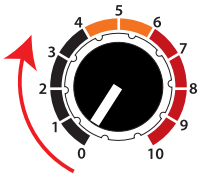
IRON AUDIO
This setting allows you to set the device to accept or reject ferrous metal detection. You can turn on or off the sounds of these metals. Iron audio is only active in Modes 1 and 2. Iron audio can also be used to eliminate false or misleading signals caused by iron minerals in the ground.

VOLUME
This button controls the overall sound level of the device. By enhancing the audio signal it allows the detection of weak signal sounds received from deeper or smaller targets. Level 10 is the level where sound is the highest. Note: as the volume level is increased, the audio produced by false signals and ground noise will also increase. Gradually turning the volume down from level 10, diminishes the sound and turns it off at the lowest setting.

GROUND SETTING

In order to turn on the device the on/off switch should be brought to the desired operating position (General, Mode 1 or Mode 2). A short sound will be heard showing that the device is ready to use. You can switch the device off by turning the switch to the OFF position.





GROUND SETTING is set to "0" and SENSITIVITY is set to "10". Search is done by lifting the coil to 5 cm from the ground and moving it right to left in a parallel fashion. Meanwhile, in order to eliminate ground effects, GROUND SETTING button is turned from left to right slowly and released when the sound stops. Your ground setting is completed.

In case the ground being searched has a variable nature, you should do the ground setting in areas where the most ground effect is received (such as by a rock or hole) in order to minimize the ground effect while searching.

It should be noted that ground setting levels should not exceed level "7". At this level, the device provides the most stable search. Over level "7", the device detects iron and gold but may cause depth loss for some other non-ferrous metals. In this case, the ground setting should be repeated by gradually decreasing the sensitivity.

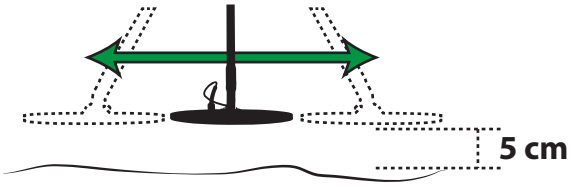
Ground setting in areas with minerals

In case ground setting cannot be achieved and the device produces deep sounds when iron sound is over level 5, this means the ground being searched includes iron minerals. Another case when ground setting cannot be achieved is when the ground is abundant in minerals.

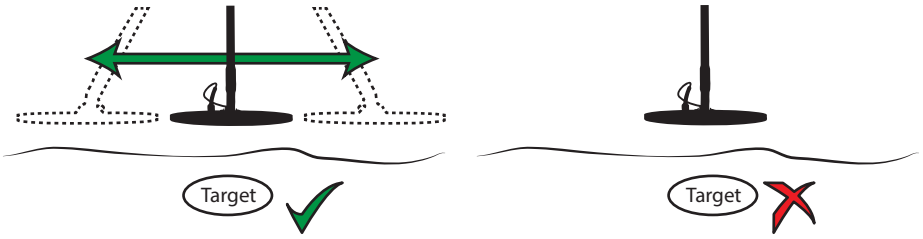
In these areas, if the ground setting cannot be still achieved even if the sensitivity is decreased, you should change to Mode 1 or 2 and IRON AUDIO must be set to the minimum.

NOTE: When there are changes in effects received from the ground or the environment, sensitivity and ground settings should be repeated.

SEARCH AND METAL DETECTION

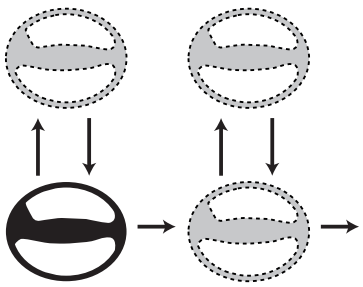


Upon completion of the settings, you can start exploring by lifting the head 5 cm from the ground and moving it right to left in a parallel fashion.



CF77 is a motion device and requires slow motion to detect the targets. That's why it should be moving to detect metals. As the device operates on the principle of automatic reset, it does not detect the metal if you hold it steady over the metal.

The device provides metals with single sound in the GENERAL MODE and 3 different sounds in MODE 1 and Mode 2. You will note 2 similar sounds for non-ferrous metals and gold and a deeper sound for ferrous metals. It is recommended that you test the device with different metals to be able to recognize the sounds. This will make the search easier for you in the field.



Moving the device both right to left and left to right on the ground will make it easier to detect the metals that are difficult to detect.

SEARCH AND METAL DETECTION

Interference Elimination
In case there is still interference even after other settings are done (ground setting, iron audio), it is necessary to turn the sensitivity down. As this sensitivity setting will affect depth, it should be done gradually.

Eliminating ferrous metals
In case you do not want ferrous metals to be detected, the IRON AUDIO button should be set to the minimum. At this setting the device does not produce sounds for ferrous metals during your search. When iron audio is turned right, it will provide a deeper sound for ferrous metals.

If you are searching in areas rich in minerals and would like to detect ferrous metals, set the IRON AUDIO to maximum. Next turn the control to the left until the iron sound coming from the ground is no longer heard. This process will eliminate iron mineral sounds and allow the device to detect ferrous metals.

WARNING!

As in all metal detectors, the device may not provide 100% accuracy because metals send different signals depending on their positions, depth, mineral intensity, conductivity and shapes. For example, a rusty sheet or can in the ground may send gold like signals. In these cases, it is best to dig to find out.

Digging the target out
When the target is detected, dig the surface by 3–5 cm and check the signal again. If no signal is received, the target is in soil removed.

If the target is still in the ground, cut the section which you think includes the target using a sharp tool. This prevents the material from being scattered around and makes it easier to fill in the hole after your recovery. Check if the target is in the hole dig. If the target is not in the hole, place the detector on the ground by maintaining parallel position of the head and grasp some soil and move it around the search coil. Make sure you do not have other metal such as a ring, watch, bracelet, etc. on you. Repeat this action until you find the target. Be sure to fill the hole back in as you found it when you make sure no targets are still left in the ground.

TROUBLESHOOTING and MAINTENANCE

Device is not operating at all?
1. Check the battery power and connections.
2. Make sure that the batteries are aligned to the battery terminals in the proper orientation.

Device receives interference?
1. Make sure that the coil is tightened and wrap the coil wire securely around the shaft.
2. Walls or ground might contain metals if you are using the device indoors.
3. There might be another detector operating nearby or you might be too close to a power grid.
4. Lower the sensitivity.
5. Ground is rich in minerals.

Device receives signals with uncertain intervals.
Intervals might mean different angle or very deep targets. Do the search from different angles or dig an additional 5-10 cm.

CF77 that you have purchased does not require extensive maintenance as it is manufactured with high quality materials. Following are the recommendations in order to get the best performance and be able to operate the device for a long time:

1- If you will not use the device for some time, remove the batteries. If batteries leak, serious damages may occur in the battery box. Your device warranty will be void because of user error.

2- Keep the device clean, if there is dust and sand accumulation around the device, wipe with a wet cloth and dry with a dry cloth. Sand and dust may damage function buttons.

3- Do not rub the search coil directly on the ground. Replace the protective cover if it is worn in order not to damage coil.

4- Control box is designed resistant to humidity but it is not water resistant. Therefore, control box should not contact water.

5- Never let the device contact petroleum-based products.

TECHNICAL SPECIFICATIONS

Operating system	VLF
Frequency	17.5 KHz
Metal detection	Sound
Sound Discrimination	3 different sounds
Ground Setting	Manual
Headphone output	1/4'' Mono

	C23 Coil (Pro Pack)	C28 Coil (Standard Pack)	C45 Coil (Pro Pack)	System Unit and Handset
Dimensions	23 cm	28 cm	39 x 45 cm	127-152 cm
	9″	11″	16″ x 18″	50-60″
Weight	460 gr	550 gr	850 gr	1,090 gr
	(1 lb -16 oz)	(1.2 lb - 19.4 oz)	(1.9 lb - 30 oz)	(2.4 lb - 38.5 oz)

Total weight including standard C23 coil (battery exluded): 1,640 gr (3.6 lb - 57.8 oz)

Battery	AA Alkaline or AA NiMh Rechargeable Battery
Operating voltage	9.3V - 13 V
Battery weight	190 gr (0.4 lb - 6.7 oz) (8 pieces f AA batteries)
Battery box weight	180 gr (0.39 lb - 6.3 oz)+ 80 gr (0.17 lb - 2.8 oz) battery box cover

2 years of warranty

NOTE: Battery, bags and headphone are not in the scope of warranty.

MAKRO
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Dealer