

GROUND™  
EFX

DIGITAL METAL DETECTOR

**STORM**  
SERIES 

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User's Manual

Model# MX60

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BachofnerBogenSport.ch

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## TERMS TO KNOW

The terms below are standard words found within this manual and the detector.

### DISCRIMINATION

Discriminating allows you to choose the metals you want to detect and the ones you want to “eliminate” or not look for. Discrimination makes it easier to avoid trash or other undesirable objects. Once it detects a metal it will categorize it to one of the metals you chose to detect for.

### IRON

Iron is the most common metal used. It has been used since ancient times because of how abundant it is. Ferrous metals are made up of iron. Objects that are ferrous metals are; nails, bolts, stainless steel and cast iron.

### PINPOINT

A narrow detection that tells you the exact location of the object that is buried.

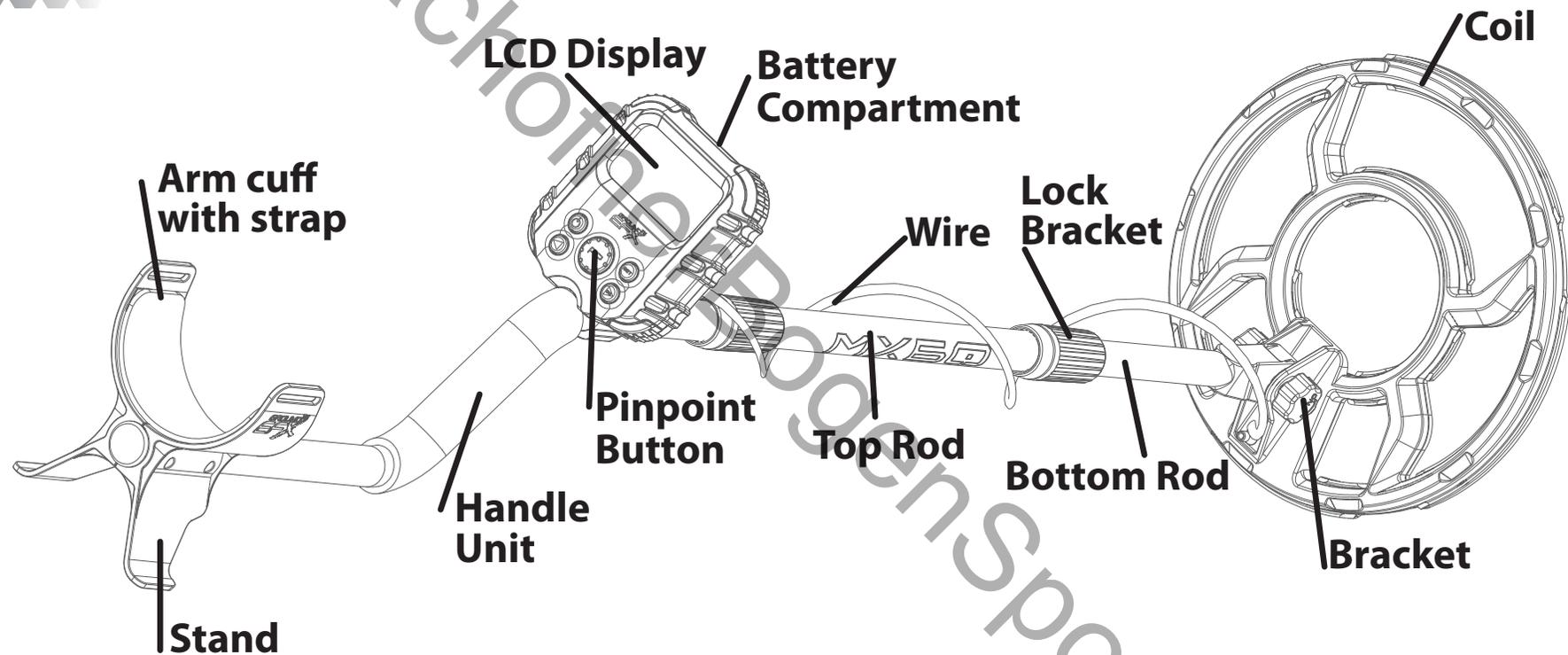
### PULL-TABS

Also known as “pop tops.” Discarded pull-tabs come from beverage cans. They can be all different shapes and sizes. They are primarily made of aluminum, which can be bothersome to many treasure hunters.

### GROUND GRAB

All soils contain minerals. Signals from ground minerals interfere with the signals from metal objects. If metal is detected in this mode it will make a sound. It doesn't detect any of earth's natural minerals so you can get a more accurate reading on what you find.

# CONTENTS

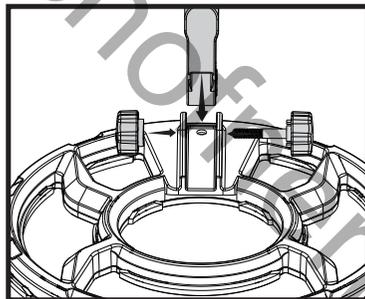


# ASSEMBLY



## 1 Assembling the coil unit

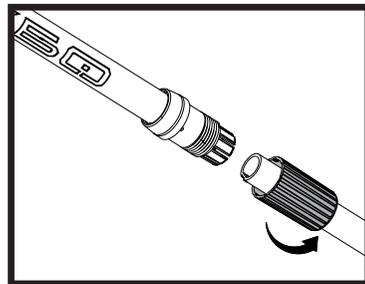
Unscrew the bracket from the bottom rod. Fit the bottom rod inside the coil and replace the bracket. Then tighten but do not over tighten. NOTE: The large hole faces down.



## 2 Connect The Rods

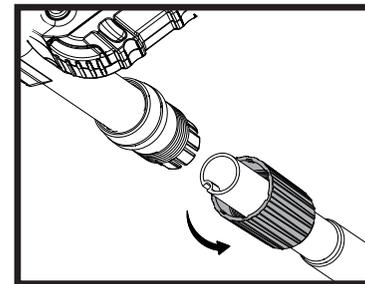
Connect the Top Rod to the Bottom Rod by sliding the Top Rod with the Locking Bracket end down. Note: The groove on the Top Rod needs to face away from you. Align grooves to one another to ensure rods stay in place.

Slide the Top Rod to the desired length and tighten the Locking Bracket by turning it to the Left.



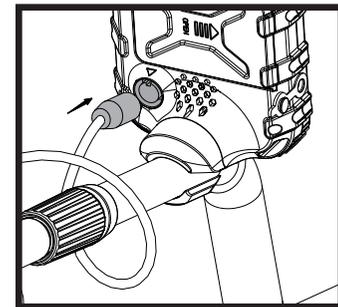
## 3 Connecting the Handle Unit

Connect the rods to the Handle Unit by sliding the Locking Bracket end down. NOTE: The groove on the rods need to face away from you. Align grooves to one another to ensure rods stay in place. Tighten the Locking Bracket by turning it to the left.



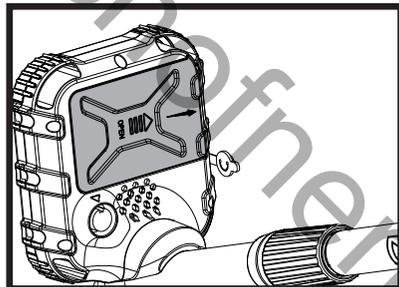
## 4 Connecting the Wiring

Take the cord that is connected to the coil and wrap it around the rods. Continue wrapping up around the rods and then plug it into the back of the LCD display.

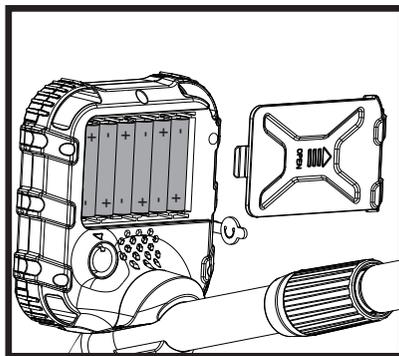


# Batteries

**1** To open the Battery Compartment door, push the door to the right.

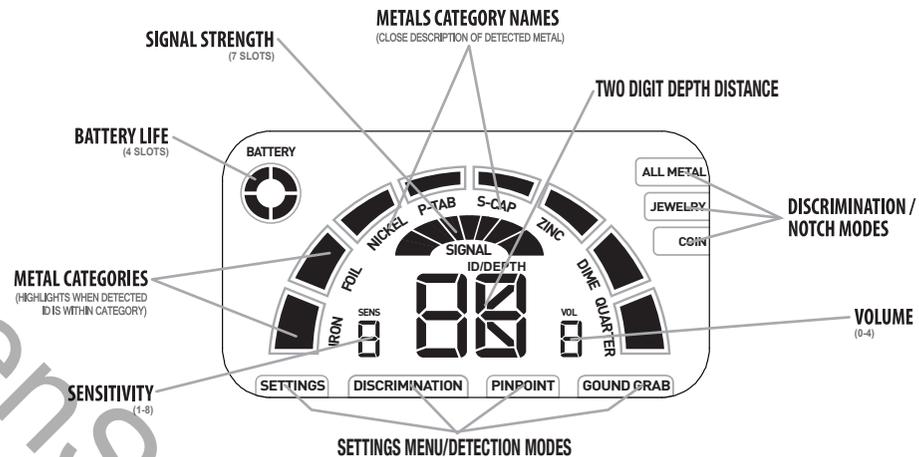


**2** Insert 6 AAA batteries according to the markings within the compartment. *Caution: Never mix old and new batteries. Never mix alkaline, carbon-zinc or rechargeable batteries.*



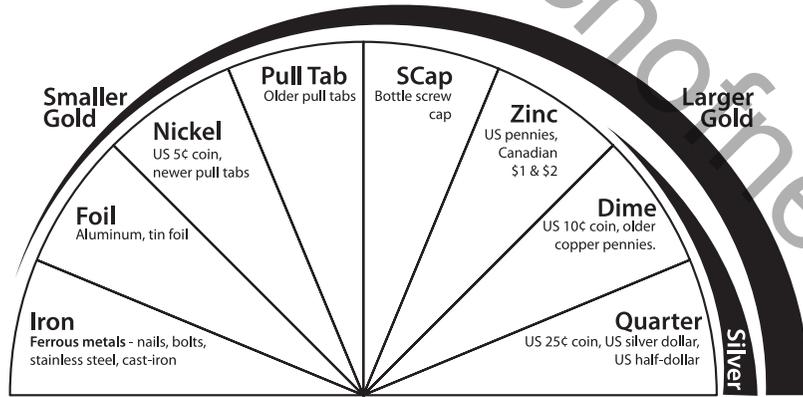
**3** Place the battery compartment back when finished.

# LCD NAVIGATION DISPLAY



## CATEGORY VALUE

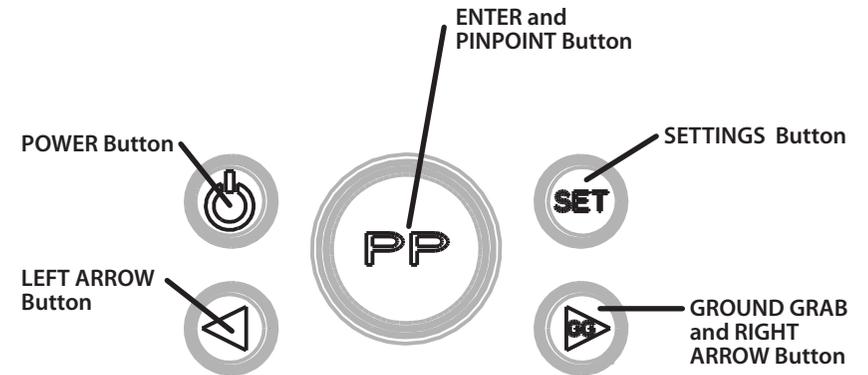
## HOW IT WORKS



**METALS DIAGRAM**

\* Silver and Gold can be in multiple spectrums

The Category Value accurately provides specific categories to help identify a buried object. Coins will most likely have a similar value with each pass with the coil due to their round shape. Gold and silver can actually be detected in various category values due to their metallic qualities. Smaller gold or silver objects will have a different value than larger gold or silver objects. Trash objects can give off a different value each time you pass over it. The angle of the detector can affect the identification of an object as well. If you decide to test the detector by waving a coin over the coil, wave it with the flat side parallel to the coil; this position is how you will find most buried coins.



# HOW IT WORKS



## Ground Grab

- Press  to Grab

## Discrimination

- Press  and then  (This mode uses your last Settings to detect)

- Press  to enter "Discrimination" Mode

- Use   to move to desired setting

- Press  to begin detecting in the selected option

## Pin Point

- Press and hold  to enter "Pin Point" Mode

## Settings

- Press  to enter "Settings" Mode

- Press   to move between Volume, Sensitivity and Discrimination

- Press  while Volume is selected to enter Volume options

- Press   to change the Volume

- Press  while Sensitivity is selected to enter Sensitivity options

- Press   to change the Sensitivity

- Press  to detect in current settings

# DETECTOR MODES

## Ground Grab

All soils contain minerals. Signals from ground minerals interfere with the signals from metal objects. All soils differ, and can differ greatly, in the type and amount of ground minerals present. This detector incorporates ground balancing algorithms which eliminate interference caused by the ground minerals found in most soils. We therefore recommend that you use GROUND GRAB to most accurately calibrate the detector to the specific ground conditions where you are hunting.

This process will maximize the detector's target identification accuracy and depth detection capability.

The Steps is as follows:

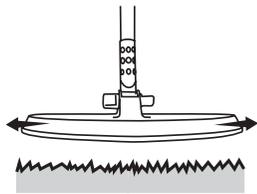
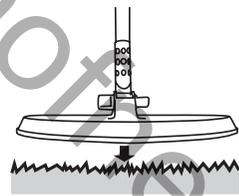
1. Find a patch of ground which is free of metal. Use the DISCRIMINATION mode, with no targets discriminated out.
2. Hold the detector with the search coil about 6 inches above the ground, then press G Grab button to activate ground grab process, then lower the coil down to within 2 inches off the ground.
3. Repeat to lift up and lower down the search coil for several times until the LCD shows "GRAB OK".

If 'GRAB ER' appears, maybe the ground is too dirty with metal trash or just wet salt soil. Find another clean place ground grab again till it is grab ok. Ground grab results is crucial to the performance of PP mode.

## Discrimination

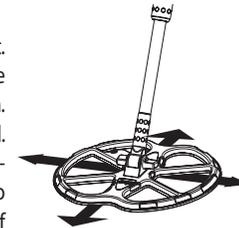
Pick the discrimination mode you want to detect in. Keep the coil parallel to the ground moving it from left to right with a stable speed. Out of the metals highlighted it will categorize the metal detected so you are aware of what metal is buried. It will inform you in two ways; 1. by highlighting the metal detected and 2. a tone response.

Discrimination identification accuracy can be influenced by moisture and temperature. The coil sweeping speed can also affect discrimination, generally faster sweeping motion has a higher sensitivity.



## Pinpointing

Pinpoint does a narrow search that will give you the exact location of a buried object. It will identify an object by a signal and tone response. Hold the trigger to activate the pinpoint function. Once activated, sweep the coil over the target area in an "X" pattern. Make a visual note of the place on the ground where the strongest signal is identified. Then dig in the center of the "X." When the trigger is released the metal detector will return back to the previous mode. NOTE: Normally, the detector takes about 5 minutes to stabilize after it powers on, it is not recommended to do pinpointing during this period of time. The sensitivity of detector will drift over time. If sensitivity drifts upward, the detector will sound off spontaneously. If sensitivity drifts downward, the detector will become less sensitive. Drift is exacerbated by the environment condition change especially the temperature change. so, in case the sensitivity drifts, you can try Ground Grab again.



## Notch Modes

When in Notch there are three options:

**All Metals:** Use this mode if you are looking for a wide range of objects. It is designed to find all metal objects.

**Coin:** When using this mode it will show you the metals found in coins. It is designed to find all types of coins and eliminate trash objects such as iron and foil.

**Jewelry:** When in this mode it will show you the metals common in jewelry. It is designed to find jewelry such as rings, bracelets, watches and necklaces.

When an object is detected it will highlight the name of the metal found as well as use a tone that identifies the metal.



# HOW TO DETECT

**STEP 1** Power ON by pushing the “POWER” button.

**STEP 2** Press the “SETTINGS” button. There will be three options to choose from:

## OPTION 1:

Use the “<” and “>” arrow keys to the Sensitivity option and press the “PP” button to select. While in Sensitivity you can change how the sensitivity by using the “<” and “>” arrow keys. Press “PP” to save.

## OPTION 2:

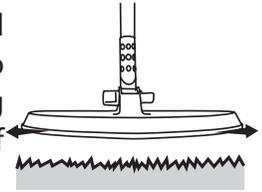
Use the “<” and “>” arrow keys to the Volume option and press the “PP” button to select. While in Volume you can change the volume by using the “<” and “>” arrow keys. Press “PP” to save.

## OPTION 3:

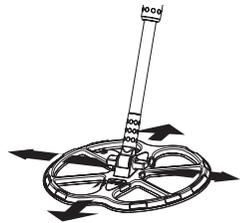
Use the “<” and “>” arrow keys to the Discrimination option and press the “PP” button to select. While in Discrimination you can eliminate certain metals by selecting either All Metal, Jewelry or Coin. Use the “<” and “>” arrow keys to scroll to the option you want. Press “PP” to save.

**STEP 3** Press the “GG” button to activate Ground Grab Mode. Display will show “OK” when ground grab is completed. If “ERROR” shows, there may be a metal object underground, find another clean area nearby to retry ground grab.

**STEP 4** While in Discrimination Mode keep the coil parallel to the ground moving it from left to right with a stable speed. If it finds something it will highlight the metal found and give off a certain tone (refer to page 11).



**STEP 5** When a metal is detected hold the “PP” button to activate Pinpoint function. Sweep the coil over the target in an “X” pattern. While in PinPoint it will show you the depth of the metal found. So you can accurately know how far down to dig.



**STEP 6** Dig object out.

**STEP 7** Once the object is found, fill the hole back up to the way you found it.

## COURTESY



- Fill holes
- Obey NO TRESPASSING signs
- Respect private and public property
- Obey all laws
- Do not cause any willful damage to property
- Do not destroy property
- Pick up after yourself, do not leave trash

## WARNING



All metal detector's may discover objects that can cause personal injury if struck. For example; power lines, explosives, gas lines, etc. When searching for treasure, first observe these precautions:

Do not use detector where you think there might be electrical lines or pipes buried below the surface.

Do not use detector in a military area where bombs or other explosives were once buried.

Avoid striking any lines that are or could be electrically powered.

Keep away from pipelines they could be carrying flammable gas or liquid.

## TONE RECOGNITION

There are eight tones indicating 8 different metals (iron, foil, nickel, P-Tab, S-Cap, Zinc, Dime and Quarter) that will help you to identify the material the detector has found.

## TROUBLESHOOTING

### PROBLEM

### SOLUTION

Won't turn ON,  
there is no sound

- Check to ensure that you are using new batteries.
- Check to see if the batteries were placed in the correct positions.
- Check the connection of the wire from the rod to the handle unit.

Abnormal/erratic  
Sounds

- Outdoor use only.
- Stay away from power lines, benches, wire fences and other metal detectors that can cause false readings.
- Reduce the sensitivity level.

Abnormal/erratic  
Sounds

- Check that the Mode you wanted is selected.
- The All-metals mode allows you to search for all metals so you will not miss the one you are looking for.

## DISCLAIMERS

WGI Innovations, LTD. is not responsible for damage, expense or injury caused by the unauthorized use of, alterations to, improper connection of and abuse or neglect of the WGI Innovations™ products.

## WARRANTY

For the warranty to be in effect, you MUST completely fill out and mail the warranty card along with your proof of purchase to WGI Innovations within (14) days after the date of purchase. As an alternative to mail, you may also visit our website and register your product at [www.groundefx.com](http://www.groundefx.com) (you are still required to mail WGI Innovations your proof of purchase before the warranty is placed in effect.) Follow the onscreen directions to complete the process.

WGI Innovations, LTD will replace all workmanship defects free of charge for ONE (1) YEAR after the date of purchase as long as your warranty is in effect.

This warranty DOES NOT COVER damage, expense or injury caused by unauthorized repairs, alterations, improper connection, shipping, abuse, theft, accident, neglect, animal damage or collateral loss.

When returning product(s) for service you MUST obtain a Return Merchandise Authorization (RMA) number from WGI Innovations, LTD. Please include name, UPS address (No P.O. Box), telephone number, RMA number and a complete description of the problem on all enclosed correspondence. When possible, pack product carefully in original carton. Customers are responsible for any shipping cost to WGI Innovations. WGI Innovations will pay the shipping cost of replacement product to the customer. We are not responsible for damage incurred in returning items for repair.

For product service send to:

WGI Innovations  
602 Fountain Parkway  
Grand Prairie, TX 75050  
(800) 847-8269

Thank you for your purchase!

## CUSTOMER SERVICE

WGI Innovations, LTD. stands behind every product we manufacture for a one year product workmanship warranty and a strong commitment to customer service. If you are in need of customer service for missing parts or need assistance with the operation or assembly of your product, we encourage you to call one of our customer service representatives and let us assist you with your WGI Innovations product.

## DISCLAIMER

WGI Innovations, LTD. reserves the right to make changes to product features, functionality and physical design at its sole discretion. As a result, such changes may not be reflected in this version of the manual.

## FCC STATEMENT

Product Name: Metal Detector

Trade Name: Ground EFX

Model# MX60

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two criteria: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.