



# **300MM DEEP TARGET WATERPROOF METAL DETECTOR**

KA3MTANDETA



# OVERVIEW

## **LCD Display**

This shows the probable type of metal, the depth of the target, range of DISC and NOTCH, the level of SENS and battery condition. It also has numeric display for DISC and TARGET.

## **Three tone audio discerning**

Sound three distinctive tones (high, medium, and low) for different types of metal.

## **Notch**

Ignores junk metal and finds valuable items by setting the notch range.

## **DISC**

Discerns the target selected.

## **Super Slow Sweep Identification**

Uses a very slow search sweep to discern different types of metal.

## **Headphone jack**

Allows the connection of headphones/earphones (not supplied) with a 3.5mm plug.

## **240mm waterproof search coil**

Allows use of the detector even if under shallow water.

### **Note:**

The detector can't be used in the rain.

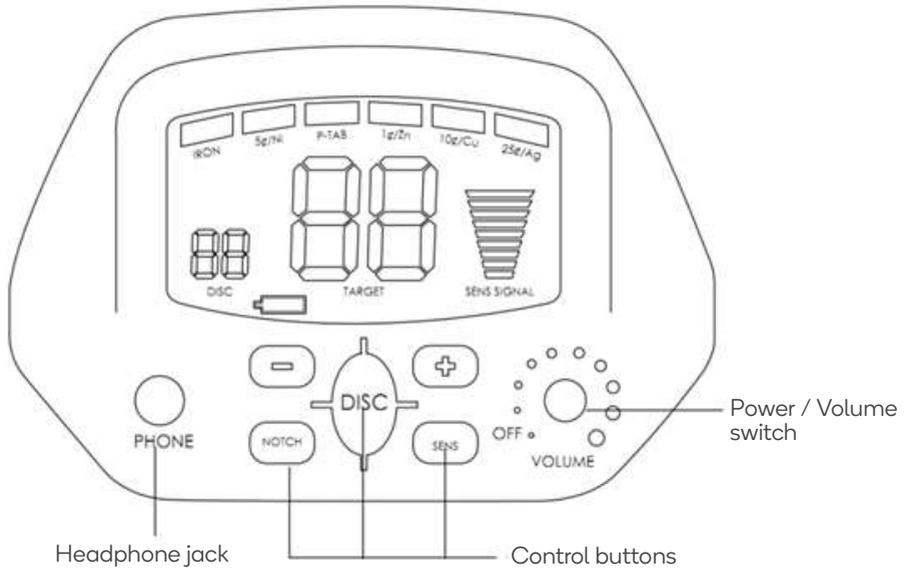
## **Adjustable Shaft**

Allows the adjustment of the length of shaft for comfortable use.

## **Backlight**

Illuminates the LCD display for detecting in dark areas.

## Control Panel



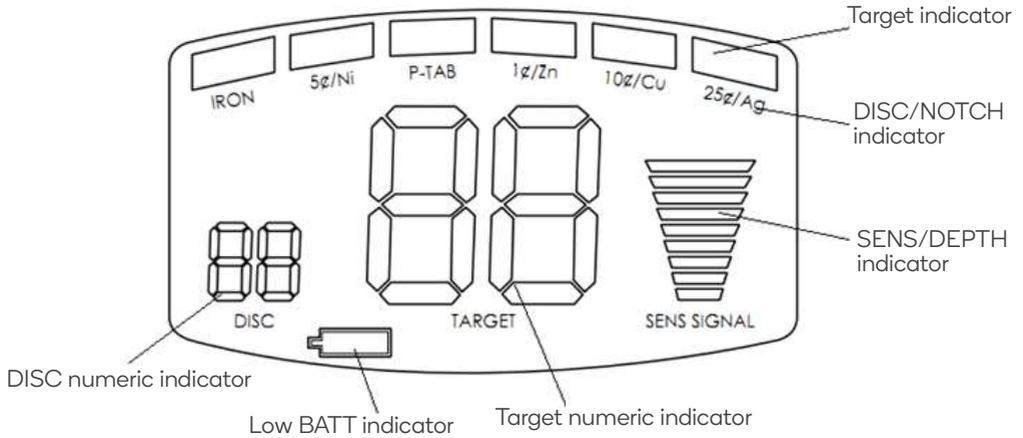
### Power/Volume Switch

Rotate the volume switch clockwise away from the off position to power on the detector. When the detector is turned on, the backlight will be activated automatically. Rotate the volume switch fully counter-clockwise to power off the detector. To increase the volume level, rotate the switch clockwise.

### Headphone Jack

Headphones or earphones with a 3.5mm connector can be inserted into the headphone jack for quiet operation. The internal speaker of the detector is automatically muted when a headphone jack is inserted.

## LCD Display



## Control buttons

### SENS

Press SENS then + or – to increase or decrease the sensitivity. The LCD will display the current sensitivity level. If the target depth is beyond the maximum the sensitivity of the detector, the target will not be found.

### DISC numeric range (0-80)

Press DISC then + or – to select the desired DISC number. If the target material is beyond the DISC range, it cannot be discerned.

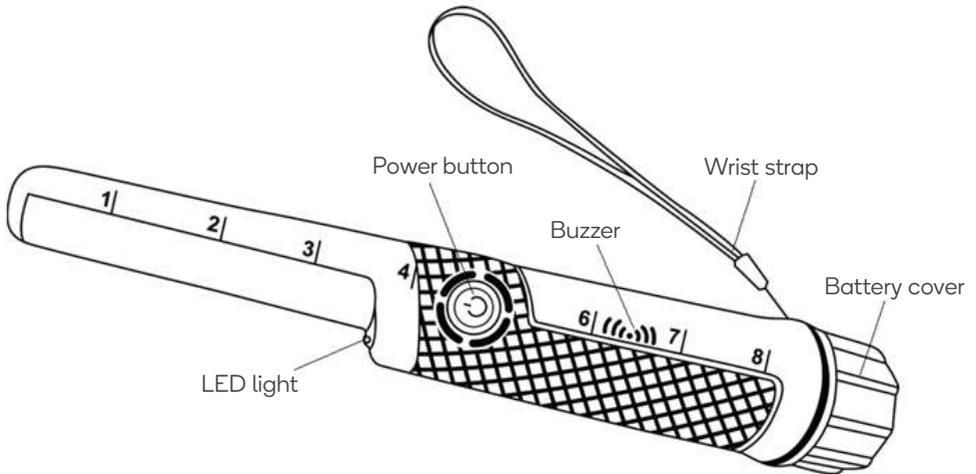
#### Note

The highest DISC numeric setting is 80. If the DISC value is set to 80, all targets less than this number will not be detected.

### NOTCH

Press NOTCH, then + or – to select the target to be notched. The cursor above the selected target will flash. Press NOTCH again, the target name below the cursor will disappear.

## Layout of the pin-pointer

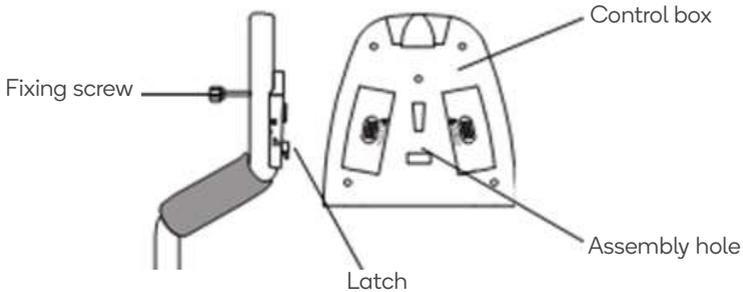


- Vibration, sound, and light: When a target is located, the detector alerts the user with pulses of vibration, sounds from the buzzer, or both sound and vibration. The LED light can be used to illuminate dark areas.
- Target distancing: As you get closer to the target, the vibration and sound will increase in intensity.
- Target indication: Three types of target indication can be set; sound, vibration, sound & vibration.
- Automatic tuning: Requires no adjustment.
- Memory: The detector memorises the current setting when the power turns off.

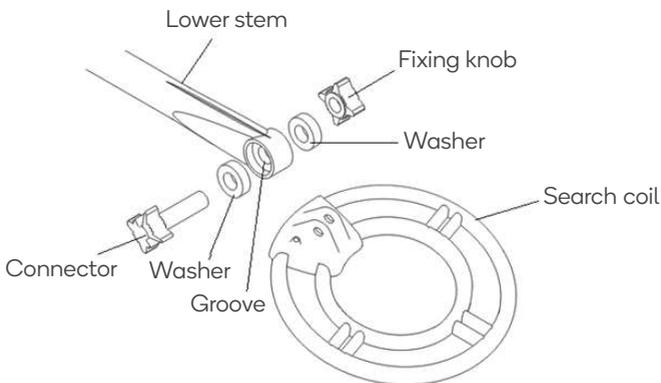
# ASSEMBLY

## Assembling the detector

1. Insert the latch on the top of the handle into the assembly hole on the bottom of the control box. Slightly push the control box in the direction of IN marked on the handle to fix the latch in place. Secure the control box in place with the fixing screw.

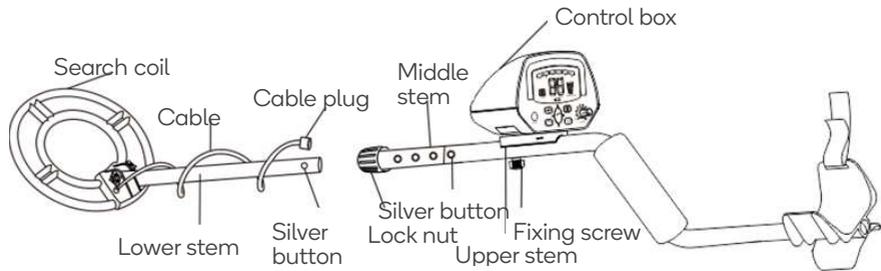


2. Unscrew the fixing knob on the search coil and remove the knob connector. Place the washers into the groove of the lower stem. Insert the stem and align the holes on the search coil bracket and the stem. Push the connector through the holes and tighten the knob.



3. Press the silver button in the middle stem and slide the stem into the upper stem.
4. Press the silver button in the lower stem and slide the stem into the middle stem.

5. Wind the search coil cable around the stem. Leave enough slack in the cable so that it is not taut. Insert the search coil cable plug into the five-pin jack on the control box.
6. Turn the stem's lock nut on the middle stem clockwise until it loosens. Adjust the stem to a length that feels comfortable when standing upright with the detector in hand, and the search coil is level with the ground, with the carrying arm relaxed at one's side. Rotate counter-clockwise to tighten the lock nut.



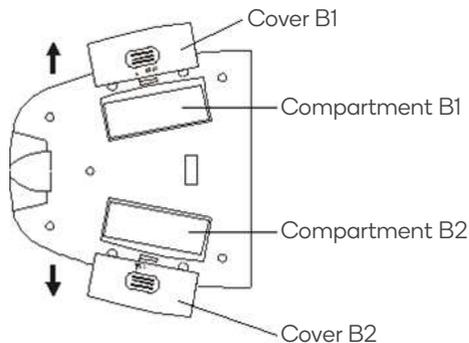
### Caution

- Do not over-tighten the search coil or use tools such as pliers to tighten it.
- The search coil's plug fits into the connector in only one way. Do not force the plug or pull on the cable, as this could damage it.

## Installing the batteries

The metal detector is powered by two 9V batteries (not included).

1. Turn off the power before installing the batteries.
2. Slide the left and right battery covers off in the direction of the arrow.
3. Place a 9V battery into the battery compartment matching the polarity symbols (+ and -) marked inside.



4. Replace the covers matching B1 cover with B1 compartment and B2 cover with compartment B2. B1 and B2 are marked in the compartments and on the covers respectively.

**WARNING:** Dispose of old batteries promptly and properly. Never bury or burn them.

## Cautions

- Use only fresh alkaline batteries of the correct size.
- Do not mix old and new batteries or different types of batteries.
- Do not mix alkaline, carbon-zinc or rechargeable (nickel-cadmium) batteries.
- If the unit is not in use for longer than a week, remove the batteries. Batteries can leak chemicals that can destroy electronic parts.
- Change the batteries if low battery indicator on the LCD is displayed.

# OPERATION

## Using Headphones

1. Headphones or earphones with in-line volume controls are recommended.
2. Insert the headphones' 3.5mm plug into the PHONE jack. The internal speaker will automatically mute when headphones are connected.
3. Set the volume to the desired setting.

## Listening safely

- To protect hearing, set the volume to the lowest setting initially.
- Before you begin listening, adjust the volume to a comfortable level.
- Do not listen to extremely high-volume levels. Extended high-volume listening can lead to permanent hearing loss.
- Do not wear headphones while operating the detector near high-traffic areas. Pay attention to traffic safety.

## Turning on the detector

Rotate the volume switch clockwise away from the off position to power on the detector and the backlight. The LCD will display all symbols, and the detector sounds low, medium, and high tones respectively. After about 2 seconds, the detector enters the standby state. The default mode is DISC; the LCD will display DISC of 00 and SENS of 6 bars.

To learn how the detector reacts to different metals, it is advised to test the unit it before it is used for the first time.

### Note:

If no metal is detected within twenty minutes, the detector will automatically turn off.

## Indoor testing and use

1. Rotate the volume switch clockwise away from the off position to power on the detector.
2. Set the operating mode:
  - a) DISC: Press DISC, then + or – to set the DISC numeric value. If the DISC value is set to 00, the detector can detect all metals. If you don't want to find one of the target materials listed on the LCD, you can set the relative numeric range of DISC by pressing DISC then + or -. For example, the numeric range for 5¢ is 6-17; simply press DISC, then set the DISC number to 18 by pressing + or -. Then the detector will not have a response to 5¢.

### Note

If one of the buttons (DISC, +, -) is not pressed within ~2 seconds, the detector will return to the standby state.

- b) NOTCH: Press NOTCH, then + or – to select the target to be notched (eliminated). The cursor above the selected target will flash. Press NOTCH again, and the target name below the cursor will disappear. This target will be notched during the detection and the detector will have no reaction to the notched target. To remove the notch, simply press NOTCH again. Press + or -, the cursor will move from left and right. If NOTCH is not pressed within ~3 seconds, the detector will return to the standby state.

### Note:

- It is not recommended to notch all targets listed on the LCD. If all targets are notched, nothing will be detected.
- To select the setting of DISC or SENS after pressing NOTCH, wait for ~3 seconds until the cursor above the target dims.

3. Press SENS then + or – to set the sensitivity. The default level is 6 bars.

### Note:

If one of the buttons (SENS, +, -) is not pressed within ~2 seconds, the detector will return to the standby state.

4. Place the detector on a wooden or plastic table and then remove any watches, rings or metal jewellery you are wearing.
5. Adjust the search coil so the flat part points towards the ceiling.

**Note:**

Never test the detector on a floor inside a building. Most buildings have the metal of some kind in the floor, which might interfere with the objects being tested or mask the signal completely.



Slowly sweep a sample of the material to be detected to find (such as a gold ring or a coin) 2-3 inches or more above the face of the search coil. When the detector detects any metal, it sounds a tone and the cursor above the target name will light. The LCD also displays the numeric value of target as well as the depth (signal strength) of it. Please note that the depth (signal strength) is only a reference, not the exact depth of the target.

**Note:**

If using a coin, the detector will detect it more easily if it is positioned so a flat side is parallel with the flat side of the search coil. A sweep with the side of coin over search coil might cause false indication and unstable display of the target.

**Low battery indication**

If the unit sounds and vibrates whilst the flashes continuously for about 15 seconds, this indicates that the battery is low.

## Target Indications

### 1. Numeric ranges of target

- IRON: 00-05
- 5¢: 06-17
- P-TAB: 18-26
- ZN: 27-38
- 1¢: 39-62
- 25¢: 63-99

#### Note:

There are a wide variety of metals and no target can be identified for certain until unearthed. This table is for general reference only.

### 2. Types of target

- IRON: indicates that the target is most likely composed of iron.
- 5¢: indicates that the target is likely composed of nickel. Some small gold rings might register within this range.
- P-TAB: indicates that the target is likely a pull tab from an aluminium can. Some small gold rings might register within this range.
- ZN: indicates that the target is likely a type of metal of zinc alloy or copper. Some medium-sized gold rings might register within this category.
- 1¢: indicates the target may be a zinc alloy. Some large rough gold items might register within this category.
- 25¢: indicates that the target is likely composed of silver.

### 3. Tones

The detector will sound three tones for different types of metal, with the built-in audio identification system sounding a unique tone for each of three categories of metal. This makes it easier to identify the metal being detected.

A low tone will sound for IRON, 5¢, foil, bottle caps or nickel. A medium tone sounds for P-TAB, ZN, 1¢ (aluminium pull tabs, zinc, or copper items). A high tone will sound for 25¢, and brass or silver items.

**Note:**

- When you set the detector to DISC or NOTCH mode, the detector sounds a medium or high tone when it detects highly oxidised iron.
- Depending on the purity, ~15% gold rings cause the detector to sound a medium tone.

**Outdoor testing and use**

1. Rotate the volume switch clockwise away from the off position to power on the detector.
2. Follow step 2 as described in the Indoor Testing and Use section above to set the operating mode.
3. Find an area on the ground outside where there is no metal.
4. Place a sample of the material to be detected (such as a gold ring or a coin) on the ground.

**Note:**

If using valuable metal such as gold to test the detector, mark the area where the item is placed to assist in finding it later. Do not place it in tall grass or weeds).

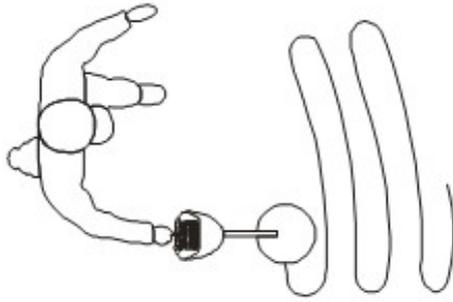
5. Hold the search coil level to the ground about 1-2 inches above the surface, and slowly move the search coil over the area where the sample was placed, sweeping the search coil in a side-to-side motion.

**Search coil sweeping hints**

- Never sweep the search coil as if it were a pendulum. Raising the search coil while sweeping or at the end of a sweep will cause false readings.



- Sweep slowly; hurrying will cause targets to be missed
- It is recommended to sweep the search coil from side to side in an arc line of 3 inches motion and keep the search coil parallel with the ground.



If the detector detects the item, it sounds a tone and the cursor above the target name will light. The LCD displays the numeric range of target as well as the depth (signal strength).

If the detector does not detect the item, make sure that the mode is set correctly for the type of metal being searched for. Ensure that the search coil is being moved correctly.

### Notes:

- The detector responds with a signal when it detects the most valuable metal objects. If a signal does not repeat after you sweep the search coil over the target a few times, the target is probably junk metal.
- False signals can be caused by trashy ground, electrical interference, or large irregular piece of junk metal.
- False signals are usually broken or non-repeatable.

### Adjusting Sensitivity

After becoming familiar with how the detector works, it is important to fine-tune the sensitivity to optimise use. Press the SENS button on the panel, then press + or - to increase or decrease the sensitivity. The level will be displayed on the LCD.

#### Note:

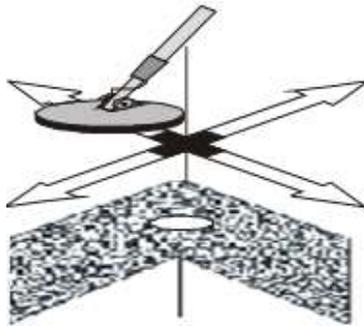
To detect deeply buried targets, you can adjust the SENS to a high position. Do not set the level of SENS to Max position or the detector will receive interference and false signals from broadcast antennas and other electronic lines, causing unstable and irregular indications.

## Pinpointing the target

Accurately pinpointing a target makes digging it up easier but takes practice. It is suggested to practice finding samples on one's own property before searching other locations.

Follow these steps to pinpoint a target:

1. When the detector detects a buried target, continue sweeping the search coil over the target in a narrowing side-to-side motion.
2. Make a visual note of exact spot on the ground where the detector beeps.
3. Stop the search coil directly over this point on the ground, then move the search coil straight forward away from you and straight back towards you a couple of times.



4. Repeat steps 1-3 at a right angle to the original search line and mark an "X". The target will be directly below the "X" at the point of the beep response.

## Factors that affect detecting

- The angle of the target buried in the soil.
- The depth of the target.
- The level of oxidisation of the target.
- The size of the target.
- Electro-magnetic and electrical interference surrounding the target.

In the area of highly mineralised ground or wet sand, the detector will sound even if there is no metal. In this case, lower the sensitivity or increase the DISC numeric value, and increase the distance between the search coil and the ground.

In an area with excessive scrap metal, you can set DISC numeric value to 50. In this case, most nails and small pieces of iron will be eliminated.

Metallic digging tools will also affect the detection if they are near the search coil.

## Helpful hints

- You can secure the detector to your wrist using the attached wrist strap.
- Before submerging the detector, always make sure the battery compartment seal is secure.
- Always use high-quality batteries such as alkaline or nickel-metal hydride (NiMH).

# CLEANING & CARE

	<p>Handle the detector gently and carefully. Dropping it can damage circuit boards and cases and can cause the detector to work improperly.</p>
	<p>Use the detector only in normal temperature environments. Temperature extremes can shorten the life of electronic devices; damage the cases of the detector.</p>
	<p>Keep the detector away from dust and dirt, which can cause premature wear of parts.</p>
	<p>Wipe the detector with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents or strong detergents to clean the detector.</p>



### **Need more information?**

We hope that this user guide has given you the assistance needed for a simple set-up. For the most up-to-date guide for your product, as well as any additional assistance you may require, head online to **[help.kogan.com](http://help.kogan.com)**

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