

# **CHANGING THE BATTERY & POWERING UP**

Manta Ray ships with (2) 9 volt alkaline batteries and an SD card with this quick guide on it and a few videos to get you started. Everything you need is built into the Manta Ray. You must first remove the back panel and insert the battery as shown before powering up your Manta Ray. BVS includes 2 batteries that will each run the unit continuously for approximately 3 hours. Manta Ray will work with any standard alkaline, Lithium-Ion or rechargeable 9V batteries but different batteries will vary runtime greatly. Usage habits may also vary greatly. For example, users that turn their unit off frequently when not in use could save hour(s) of battery life. Be sure to change battery when the low battery indicator in the lower left corner of the screen appears because the range and sensitivity will be affected by low battery. Simply HOLD the orange trigger in for a few seconds to power up your Manta Ray. HOLD it in again for a few seconds to power Manta Ray OFF. Manta Ray takes approximately 5 seconds to power up in normal handheld mode. You should change batteries as soon as a small "LOW" battery icon appear in the lower left corner of the display.





### **HANDHELD MODE OPERATIONAL PROCEDURES**

Manta Ray is a very sensitive instrument. Some metallic objects other than phones may trigger the Manta Ray though most metals should not trigger false detections. You will notice that waving it very quickly in the air will produce false triggers and not waving it at all will produce no triggers (even if there is a cell phone inches away from it). This is because Manta Ray is constantly taking measurements based on minute changes in its orientation to ferromagnetic objects and the earth's electromagnetic energy field. The LCD screen indicates slight variations in detected objects but until you see crosshairs, blue LEDs (blink ON only during detection) and hear an audible BEEP, there is no reason to suspect you have discovered a hidden cell phone. For best results follow these simple guidelines:

- SWEEP up and down or back and forth in a uniform speed and motion parallel to the area of interest. **NEVER** tilt or turn while sweeping.
- MAINTAIN DISTANCE of 0 to 6 inches from the surface while sweeping. Keep in mind the possible thickness of any wall that the phone may be behind. (i.e., if the wall is 1" thick, you should scan no more than 5" away from wall.)
- If the LEDs blink to form a single blue circle, you're probably too far from object.
- If the LEDs blink to form two blue circles that are close together, you're probably at the right distance.











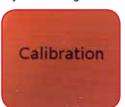
## **STATIONARY MODE OPERATIONAL PROCEDURES**

Manta Ray can also function in a stationary mode for scanning packages or any item that might be placed in front of it. You must first prepare it for power. In stationary mode, the Manta Ray must be completely stationary and can only be powered by the included AC adapter. Remove the back cover, remove the battery and attach the battery plate to the other terminal connection in the handle. Then connect the included AC adapter to the power input on the side of the unit. To enter this mode, power up the unit normally and then push the trigger once again. You will see 'Warm-up Required'. Leave it in this mode and wait for approximately 15 minutes for warm-up to complete. Once the unit has warmed up, it will go into 'Stationary Mode' and then straight into 'Calibration Mode' for a few seconds. Manta Ray must be absolutely stationary during both calibration and stationary mode usage and free of any nearby (at least 3 feet away) ferromagnetic energy while it is calibrating. You can press the trigger to toggle between modes and recalibrate at any time. Ferromagnetic objects can be detected from up to 12" away when in Stationary Mode and this is indicated by the blue instead of the yellow/orange/red in handheld mode.



Warm-up Required

Stationary Mode





# **USER'S GUIDE**



Manta Ray<sup>TM</sup> is the answer to the growing problem of illegal and contraband cell phones in correctional facilities, government buildings and law enforcement agencies. Berkeley's unique cell phone detection device is a close range security scanner for concealed mobile phones (ON or OFF and even with battery removed). Manta Ray<sup>TM</sup> differs from traditional metal detectors in that it scans for specific components common to all cell phones and not just metal. This reduces false triggers\* such as watches, keys, coins, belt buckles and other common metal items that would trigger a standard metal detector. Manta Ray<sup>TM</sup> is the perfect tool for any security detail tasked with rapid scans of many targets as well as targeted searches for cellular phones hidden behind, inside or among common structures. Manta Ray<sup>TM</sup> works right out of the box for anyone with a vibrant LCD and standard removable 9V battery power. Manta Ray™ is designed and manufactured entirely in the U.S.A..

- Minimize False Triggers
- Handheld or Stationary Mode
- Simple Operation for Anyone
- Runs on Standard 9V Battery





- Detect phones hidden under mattresses, behind walls & even inside metal enclosures
- Detects cell phones even when switched OFF and battery removed













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Some metallic objects other than phones may trigger the detector though most metals do not cause false detection.