

Document Number: M3-001 Rev: 2.1

GTC M-3 Magnetometer – Three-Axis, Digital Magnetometer

Grimstone Inc.'s M-3 is a small, light-weight 3-axis digital magnetometer. It uses an I2C serial interface with an embedded LED panel to provide resolution for 1 to 16 milligauss.

Features:

- 3 axis (X, Y, Z) measurement for uniform output regardless of angle
- Auto baseline to remove effects of earth's magnetic field
- Operates on a CR1612 CR1632 coin cell battery
- 16 LED output (red with M-3, green with M-3g)
- 11 inch strap for hands-free operation

Specifications:

- Operating Temperature Range: -25C 70C
- Clock speed: 8MHz
- Resolution: 2 milli-gauss

Applications:

- Electronic circuit checking
- Paranormal Research
- Environmental EMF pollution detection







Warnings:



This product is electrical in nature. While product enclosure is water resistant, it is not water proof. Avoid contact with water. Do not submerge product.

Avoid shock or sudden drop. Fasten strap securely before operation.

General Operation Directions:

1. Insert battery via back battery compartment door. The M-3 accepts all CR1612 through CR1632 batteries.

The last LED on the indicator will momentarily turn on.



Note: Pressing the small reset button on the motherboard during this time will enter the system into Calibration Mode. See Calibration instructions.

2. LED indicator will then measure the surrounding magnetic field. Each LED represents 1 milligauss.

Calibration:

1. Insert battery via back battery compartment door. The M-3 accepts all CR1612 through CR1632 batteries.

The last LED on the indicator will momentarily turn on.

- 2. While the last LED is turned on, press the small reset button on the bottom motherboard.
- 3. Unit will begin flashing random LEDs for approximately thirty seconds. During this time slowly rotate the meter in place 360 degrees along each axis.

Note: You can rotate the meter more than 360 degrees to help maximize accuracy. Rotating less than 360 degrees on each axis will prevent the M-3 from properly calibrating.

4. The M-3 will then exit calibration mode and begin reading surrounding magnetic fields.

Battery Removal / Changes:

1. Use a small non-ferrous (metal) object to gently slide the battery out of the battery holder. Pen clip or pencil works well.



