

# Magnetic Field Detector Analyser MFDA1A

A versatile imaging system for the detection and analysis of permanent magnetic fields using a sensor array.

The MFDA1A uses an array of 8 x 8 sensors to create an image representing the shape and intensity of static magnetic fields. As a magnet is approached, the shape is revealed providing more information to the user compared to a single-point magnetometer.

The device includes a headphone output such that the presence of magnetic fields can be determined from a variable pitch tone to aid the initial detection of magnets.



**Sensor Head**

## Features

- ◆ External sensor array (8 x 8)
- ◆ Internal Scalar Magnetometer
- ◆ Backlit Graphic Display
- ◆ Audio Output (3.5mm jack)
- ◆ Powered by 2 x AA

## Applications

- ◆ Anti-Mechanical Doping (cycling)
- ◆ Test and Measurement



## Specifications

Unless Otherwise Stated: Battery = 2 x Energizer E91 Alkaline, Backlight (BL) = Low, Temp = 20°C

| Parameter                             | Min  | Typ | Max | Units |
|---------------------------------------|------|-----|-----|-------|
| Internal Mag Sensitivity <sup>1</sup> |      | 10  |     | μT    |
| External Mag Sensitivity <sup>1</sup> |      | 100 |     | μT    |
| Internal Mag Range                    | 0.01 |     | 2   | mT    |
| External Mag Range                    | 0.1  |     | TBA | mT    |
| Internal Mag Accuracy <sup>2</sup>    |      | 2   |     | μT    |
| External Mag Accuracy <sup>2</sup>    |      | TBA |     | μT    |
| Battery Life (Internal only)          | 20   | TBA |     | Hours |
| Battery Life (both sensors)           | 4    | TBA |     | Hours |

Note. Specifications are subject to change without notice.

1. Minimum practical field strength for reliable detection.
2. Subject to correct magnetometer calibration.