MSDH

PORTABLE FERROMAGNETIC DETECTOR
FOR THE SAFETY OF PATIENTS AND SYSTEMS
IN MRI ROOMS

- PREVENTIVE DETECTION OF FERROMAGNETIC OR MAGNETIZED OBJECTS which can cause damage due to the attraction of the magnet in MRI rooms
- HIGH AND UNIFORM SENSITIVITY
- Accurate localization at 360° by means of MULTI-ZONE ACOUSTIC AND OPTICAL ALARM SIGNALING
- EXTREMELY DURABLE DESIGN including stainless steel and high impact reinforced plastics
- PASSIVE DETECTION, NO FIELD EMISSIONS
- UP TO 70,000 EVENTS CAN BE RECORDED locally (FIFO LOGGER) with traceability of the alarms, programming modifications and diagnostics
- PROGRAMMING of operational parameters and DOWNLOADING OF DATA LOGGER by smartphone or portable PC
- Built-in battery power supply with 26-HOUR BATTERY LIFE or with 24Vdc external adapter
- Large number of CEIA MSD ferromagnetic detectors installed
**MSDH SPECIFICATIONS**

**PORTABLE FERROMAGNETIC DETECTOR FOR THE SAFETY OF PATIENTS AND SYSTEMS IN MRI ROOMS**

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**ON/OFF push-button**

- Adjusting operational parameters and programming through smartphone or portable PC

**4-key keypad**

- Programmation at User and Supervisor level

**SECURITY**

- Normal operation, no alarm
- Full height alarm indication
- Indication proportional to signal intensity
- Alarm indication with 5 different localization zones
- Full height alarm indication, followed by zonal signaling
- Blinking light: diagnostics alarm
- Connecting BT device in progress

**MULTI-COLOR STATUS AND ALARM WARNING LIGHT**

- **GREEN LIGHT**
  - Normal operation, no alarm
- **YELLOW LIGHT**
  - Detection of ferromagnetic object below alarm threshold
- **RED LIGHT**
  - Detection of ferromagnetic object above alarm threshold:
    - Full height alarm indication
    - Indication proportional to signal intensity
    - Alarm indication with 5 different localization zones
    - Full height alarm indication, followed by zonal signaling
    - Blinking light: diagnostics alarm
- **BLUE LIGHT**
  - Connecting BT device in progress

**ALARM SOUNDER**

- Alarms for target over the alarm threshold:
  - Fixed tone
  - Tone proportional to signal intensity
  - Single pulse for pinpointing target
- Alarm tone can be selected, continuous and intermittent
- Self-diagnosis signal: intermittent tone

**BT HEADSET (ACCESSORY)**

- Copies all acoustic indications, with the addition of checking BT connection

**POWER SUPPLY**

- AC/DC external power adapter
  - 100 ... 240 V~ , 47...63Hz, 40W
- Embedded rechargeable battery
  - 16h typical / 17h max. of continuous operation with 3h battery charge
  - 24h typical / 26h max. of continuous operation with 4.5h battery charge

**DETECTOR ENVIRONMENTAL CONDITIONS**

- **Working temperature**
  - 14 to 149°F
- **Storage temperature**
  - -35 to 158°F
- **Relative humidity**
  - 0 to 95%, non-condensing

**WEIGHT**

- **MSDH**
  - 21 lbs
- **Carrying case**
  - 1.5 lbs
- **AC/DC adapter**
  - 1.6 lbs
- **Installation kit**
  - 0.6 lbs
- **BT kit**
  - 0.5 lbs

**MSD DIMENSIONS**

- **Height**
  - 75"
- **Width**
  - 13"

**SHIPPING INFORMATION**

- **Dimensions (WxDxH)**
  - 16" x 79" x 19"
- **Weight**
  - 53 lbs

**DEGREE OF PROTECTION**

- IP65 for indoor and outdoor use

**AVAILABLE ACCESSORIES**

- **EVO function activation**
  - code 88918
- **BT audio function activation, headset and charger**
  - code 88919
- **MSD-RRU Remote Relay Unit**
  - code MSD-RRU
- **App CEIA FMD**: the application allows monitoring of the device, adjustment of the settings and downloading of data logger. Available on Google Play Store. REQUIREMENTS: Android 7.0 or later, BT interface available
- **Solid Rubber feet**
  - code 92799
- **MSD Demo Kit**: kit of demonstration objects, consisting of: BT headset • Hair pins • Hospital pager • Magnet • Medical scissors • Micro cell phone • Micro smartphone • Needle • Razor blades
  - code 89052
- **MSD Maintenance Kit**
  - code 91541
- **Standing mat**: self-adhesive mat with indication of position and rotation
  - code 94590

**CERTIFICATION AND COMPLIANCE**

- Passive device: safe for use for pacemakers and other medical implants
- Compliant with the applicable electromagnetics Standards on Human Exposure and pacemaker safety
- Compliant with and certified to the applicable International Standards for electrical safety and EMC