

Panic MRD (MRD ver. 2.1) General Description

The Panic Manual Reset Device (MRD) is a small microprocessor based battery operated device which is housed in a small plastic case. The Panic MRD is used by probation officers in the home arrest environment. It is used for turning the offenders' transmitters on and off as well as transmitting three types of signal messages:

Officer enters the offender's premises.
Officer leaves the offender's premises.
Officer in distress (panic message).

The pushbuttons panel can vary between different models of the Panic MRD, providing different functionality while maintaining the same internal PCB hardware. The panel can have the following configurations:

All 5 buttons are present – The device functions as MRD, and can send IN, OUT and PANIC messages.

The ON and OFF buttons are not included – The device can only send IN, OUT and PANIC messages.

Only the red panic pushbutton is included – The device functions as a PANIC button only.

The Panic MRD is composed of one PCB and a replaceable 12V battery. The PCB includes the controlling CPU and the transmitter circuit.
The antenna is a rectangular loop antenna at the PCB external size.

The external interface of the unit includes:

- 1 LED.
- 5 touch pushbuttons.
- 2 touch points for resetting an offender's transmitter.

The Panic MRD transmits at 318.000 Mhz.

Oscillators in the MRD:

Y1 – 2 Mhz Ceramic Resonator
Y2 – 318 Mhz SAW Filter