IMPROVISED EXPLOSIVE DEVICE EFFECTS SIMULATOR, INCREMENT 1 (IEDES 1), MODULE CONTROL UNIT (MCU) 315 MHZ

IEDES Module Control Unit (MCU)

Training Category/Level Utilized:
Ordnance/Level 3

Logistic Responsible Command, Service, or Agency:
PEO-STRI, Orlando FL

Source and Method of Obtaining:
Available through local TSC

Purpose of Trainer:
The Module Control Unit (MCU) is a major component of the IEDES 1 training system. The MCU functions as a remote triggering unit capable of wirelessly controlling a minimum of four IEDES Electronic Common Interface Devices (ECID's) simultaneously or independently on four approved frequencies within 315.0 – 315.375 MHz, or controlling one ECID in a hard-wired configuration. The MCU controls both ECID's and pneumatic devices at a Radio Frequency (RF) range of 1,000m Line of Sight (LOS) and a hardwired range of 500 m. The MCU recognizes unique identifiers transmitted by its associated ECID's and communicates with those ECID's exclusively. The MCU transmits arming/disarming commands to ECID's, and provides dual initiation activation of detonation commands. The MCU is capable of initiating a Built-In-Test (BIT) for fault detection and connectivity status of ECID's and provides status notification to the operator. The MCU provides a low-battery life indicator. It is capable of storing and displaying trigger type(s), signature device type, location data, number of denotation commands given to each ECID, and each ECID's detonation/jamming status. It is capable of retrieving event data from its associated ECID's for After Action Review (AAR) purposes.

Functional Description:
The MCU is a hand held Personal Data Assistant (PDA) and functions as a remote triggering unit wirelessly controlling a minimum of four ECID's simultaneously or independently on each given frequency, or controlling one ECID at a hardwired range of 500 meters. The MCU communicates wirelessly to the ECID on Government approved radio frequencies. The MCU utilizes "plug and play" components to satisfy radio frequency requirements, and has a maximum effective range of 1,000 meters LOS.

Physical Information:
MCU Dimensions: 9" x 4" x 1.5" Weight: 3 lb.

Equipment Required, Not Supplied:
None