

Communications & Documentation Technologies



The *Mobile Map Plus*TM (*MMP*) is a state-of-the-art mobile radio-graphic display system. Alarms received by the *MMP* encoder are checked and formatted into an error-checking frequency-shift-keying (FSK) signal which is sent to the radio transmitter for wireless signalling to the *MMP* Radio-Graphic Displays. The radio signal is received no matter the location of the *MMP* display. The alarm information is checked for accuracy and then displayed on the graphic front panel map of the *MMP* display plus an audible warning signal. The audible warning can be silenced using the top-mounted acknowledge switch. However, any new alarm appearing at the mobile map unit will cause the audible alarm to resound.

The *MMP* is continuously supervised "in use" for both communications to the central control unit and interference by outside signals. The *MMP* encoder periodically sends a test signal to each *MMP* display regardless of whether alarms are present. Each *MMP* display continuously listens for transmissions from the *MMP* transmitter and for unidentified radio signals on the *MMP* radio frequency. Separate front panel lamps indicate loss of communications with the central transmitter and/or the presence of an interference signal.

The *MMP* encoder can format and transmit up to 64 independent alarm signals plus an optional security code to each *MMP* mobile radio-graphic display. The FSK signalling scheme allows complete transmission

MOBILE MAP PLUS™

MOBILE RADIO-GRAPHIC DISPLAY SYSTEM

- Custom CAD/Laser-produced Graphics
- Continuously Supervised "in Use" for Both Communication and Jamming
- Optional Programmable Security Code
- Independent Radio Transmitter

in less than one second. A programmable feature of each *MMP* display allows combinations of alarm, tamper, access, and secure signals up to a maximum of 64 signals.

The *MMP* mobile radio-graphic display features selfcontained construction in a sealed, drawn metal enclosure with integral sunshield. All circuit boards are conformally coated for extra environmental protection. The graphic panel is a custom Computer-Aided-Design-produced polycarbonate sheet. The graphic is photographically reproduced on the reverse side of the faceplate. Long-life ultrabrite LED indicators are imbedded in the reverse side of the graphic. Back lighting is provided for nighttime use. A rear panel audio output jack enables testing without special test equipment.

The *MMP* mobile display is furnished with an adaptable mounting bracket. Both the display enclosure and bracket are finished with a heat-sealed powder-coat surface. The *MMP* radio transmitter is built in a rugged metal enclosure enabling remote mounting near the antenna location. The radio transmitter is matched to an antenna and transmission line to provide the desired radio coverage. A built-in transmission test button enables radio testing without special test equipment. The *MMP* alarm encoder is provided in a convenient wallmounted enclosure. Encoder circuitry is contained on plug-in circuit boards. Wiring connections are via screw-type terminal strips. A built-in test switch allows testing the complete *MMP* system without the need for special test equipment. Frequency selection and licensing assistance is also available from the factory.

SPECIFICATIONS

Mobile Radio-Graphic Display

Radio Section:

Frequency: 450-470 MHz Sensitivity: 0.5 uV Signal-to-Noise Ratio: 12 dB SINAD Electronics:

Electronics.

FSK Signal Decoder CMOS Integrated Circuit Logic *Power Supply:* 12 VDC, 1 amp from vehicle battery

Controls:

Alarm Acknowledge Switch, Lamp Test Switch, Vehicle Horn Activate Switch, Audio Output

Custom Graphic Display:

1/4-inch polycarbonate display screen
Alarm Lamps: Ultrabrite LEDs
"REC" LED indicates proper operation of "in use" supervision.
"INT" LED indicates presence of an interference signal.

Dimensions:

8" X 11" X 3-1/2", plus sunshield *Weight:* 3.5 lbs.



Specifications and features subject to change without notice.

Radio Transmitter

Frequency Range: 450-470 MHz
Power Output: 2 watts into 50 ohms
Signal Input: Current loop from encoder unit
Indicator Lamps: Green LED, power; Red LED, transmit
Controls: Test transmit switch
Power Supply: 12 VDC, 1 Amp. plug-in power supply (included)
Enclosure: 12" X 12" X 4"

Alarm Encoder

Alarm Inputs: 8 inputs per basic encoder. Expandable in groups of 8 inputs to a maximum of 64 inputs. All inputs optically isolated.

Signal Output: 2-wire "telephone line" current loop. Typical encoder to transmitter distances up to 3000 feet.

Indicator Lamps: Green LED, power; Red LED, transmit

Controls: Manual keying test switch, push button

Power Supply: 12 VDC, 1 amp provided from wall-

mounted plug-in transformer (included).

Enclosure:

18-1/2" X 14-1/4" X 4-1/8" *Weight:* 5 lbs.



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