

# 8MTJ-A-16 Series Radio Alarm Box



## Description

The 8MTJ-A-16 Series intelligent Radio Alarm Box is a multifunctional radio alarm reporting transmitter designed to communicate a variety of emergency messages to a Signal Communications Vision 21 System Processor.

The Radio Alarm Box utilizes a microprocessor technology in an advanced design, while providing the optimum in versatility and performance. Its modular configuration allows for easy installation, maintenance and expansion. It is furnished with an extensive diagnostic and self-testing system to supervise box operation.

The basic 8MTJ-A-16C (2-way Command & Control) and the 8MTJ-A-16S (Solar Powered) are Factory Mutual (FM) Approved for operation in conjunction with the Vision 21 System Processor and have been designed for Public and Proprietary Signaling Systems in accordance with NFPA 72.

## Operation

The Radio Alarm Box utilizes a Frequency Modulated (FM) radio carrier with DTMF (Dual Tone Multiple Frequency) data encoding. The DTMF encoding produces reliable data transmission. The FM signal's high noise immunity to spurious noise and competing signals ensures reliable communication with the receiver console.

Sixteen supervised initiation circuits are available to monitor either normally open (N.O.) or normally closed (N.C.) dry contacts. When activated, each circuit transmits the box number, zone and message type (i.e. Alarm, Trouble, etc.) to the Vision 21 System Processor.

Alternative means of alarm initiation include a pull hook or up to three function buttons located on the outside of the optional cast enclosure. In addition to this, a serial interface board is available to allow a supervised RS-232 connection to equipment, such as an addressable FACP or optional alarm decoder. (Please consult the factory for details on these options and configurations.)

## Features

- Multiple Zone Transmission
- Extensive Built-in Diagnostics
- Programmable Self-Test Scheduling
- Transmits Alarms Restored
- Vandal / Intrusion Alarm
- Reliable Frequency Modulated (FM) Radio Transmission
- Dual-Tone Multi-Frequency (DTMF) Data Encoding
- Local Annunciation
- Programmable Round Spacing
- Modular Configuration; allows for easy installation, maintenance and expansion
- Alarm & Trouble Relay Output (optional)



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## Specifications

	<b>8MTJ-A-16 Standard</b>	<b>8MTJ-A-16C Command and Control</b>	<b>8MTJ-A-16S Solar Powered</b>
<b>Communications</b>			
Data Transmission:	Narrowband FM Radio	Narrowband FM Radio	Narrowband FM Radio
Output Power:	1, 2, 4 Watts	1, 2, 4 Watts	1, 2, 4 Watts
Frequency Range:	72 - 76 MHz 135 - 175 MHz	72 - 76 MHz 135 - 175 MHz	72 - 76 MHz 135 - 175 MHz
Signal Range:	Up to 20 miles line of sight, or farther using repeaters	Up to 20 miles line of sight, or farther using repeaters	Up to 20 miles line of sight, or farther using repeaters
<b>Electrical</b>			
Primary Power:	120 VAC, 60 Hz	120 VAC, 60 Hz	Photovoltaic Panel
Standby Power:	12 VDC, 180 hours	12 VDC, 180 hours	12 VDC, 25 Ah sealed lead- acid battery, 15 day capacity
Control Relays (optional):	N/A	SPST relay, 2 A @ 30 VDC, 2 A @ 250 VAC	N/A
CAT Relays (optional):	SPST relay, 2 A @ 24 VDC	SPST relay, 2 A @ 24 VDC	SPST relay, 2 A @ 24 VDC
<b>Indicators</b>			
Visual:	Alarm and Trouble LEDs for each zone	Alarm and Trouble LEDs for each zone	Alarm and Trouble LEDs for each zone
Audio:	Pulsating Tone	Pulsating Tone	Pulsating Tone
<b>Environmental</b>			
Temperature Range:	-40°F to 150°F -40°C to 65°C	-40°F to 150°F -40°C to 65°C	-40°F to 150°F -40°C to 65°C
Component Protection:	Moisture resistant, anti- fungus coating, salt-spray tested	Moisture resistant, anti- fungus coating, salt-spray tested	Moisture resistant, anti- fungus coating, salt-spray tested
<b>Enclosure</b>			
Housing Type:			
Standard:	Sheet metal, NEMA 1 (indoor use only)	Sheet metal, NEMA 1 (indoor use only)	N/A
Option #1:	Cast Metal, cottage style surface mounted NEMA 3R (outdoor use)	Cast Metal, cottage style surface mounted NEMA 3R (outdoor use)	Cast Metal, cottage style surface mounted NEMA 3R (outdoor use)
Option #2:	Cast Metal, cottage style recessed mounted NEMA 3R (outdoor use)	Cast Metal, cottage style recessed mounted NEMA 3R (outdoor use)	Cast Metal, cottage style recessed mounted NEMA 3R (outdoor use)
Dimensions:			
Standard:	14"h x 12"w x 6"d	20"h x 16"w x 6 1/2"d	N/A
Option #1:	21"h x 16"w x 9 7/16"d	21"h x 16"w x 9 7/16"d	21"h x 16"w x 9 7/16"d
Option #2:	24"h x 19 1/8"w x 9 7/16"d	24"h x 19 1/8"w x 9 7/16"d	24"h x 19 1/8"w x 9 7/16"d
Mounting:	Vandal resistant	Vandal resistant	Vandal resistant
Color:	Fire red (consult factory for additional options)	Fire red (consult factory for additional options)	Fire red (consult factory for additional options)



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