MX934i Multiplex PIR Intrusion Detector

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The wall mount MX934i PIR Intrusion Detector uses Motion Analyzer II signal processing to reduce false alarms. Alarm and tamper conditions are transmitted to the control panel through the two-wire multiplex bus. The detector's replaceable and pointable mirrors, three coverage patterns, and three mounting options provide installation flexibility.

Functions

Motion Analyzer II Processing

Motion Analyzer II uses multiple thresholds and timing windows to analyze timing, amplitude, duration, and polarity of signals to make an alarm decision. It tolerates extreme levels of heat and light disturbances caused by heaters and air conditioners, hot and cold drafts, sunlight, lightning, and moving headlights.

Insect and Draft Immunity

The sealed optical chamber provides immunity to drafts and insects.

Three Sensitivity Settings

 Standard Sensitivity: Recommended setting for maximum false alarm immunity. Tolerates environment extremes on this setting. Not



- Motion Analyzer II processing
- Unique address switch settings
- Insect and draft immunity
- Three sensitivity settings

recommended for long range or barrier type coverage patterns. The detector is shipped in Standard Sensitivity mode.

- Intermediate Sensitivity: Recommended setting for any location where an intruder is expected to cover only a small portion of the protected area. Tolerates normal environments on this setting. This setting identifies intruders more accurately.
- **High Sensitivity**: Fast response to intruder signals. For use in quiet environments where heat and light fluctuations are not anticipated.

Certifications and approvals

Region	Certifica	tion
Europe	CE	2004/108/EC EMC Directive (EMC); 2006/95/EC Low-Voltage Directive (LVD) [MX934i]
USA	UL	ANSR: Intrusion Detection Units (UL639)

Installation/configuration notes

Compatibility Information

Control Panels

Multiplex Expansion Modules

- DS7400Xi Series
- DS7430
- G Series
- DS7436
 - D8125MUX

Notice

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The DS7400Xi Series Control Panels require ROM version 1.07 or greater.

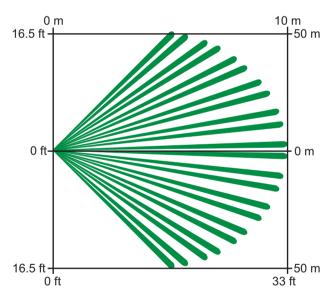
Mounting Considerations

Select a location that is most likely to intercept an intruder moving across the coverage pattern. Ensure the mounting surface is solid and vibration free. Avoid hot and cold drafts, windows, moisture, direct or reflected sunlight, and small animals. The MX934i is not for outdoor mounting.

Notice

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Misaligning the detector in an optional mounting bracket can reduce range and increase dead zones.



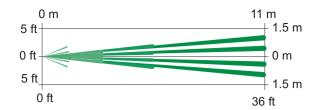
Top View

Standard Broad Coverage: 10 m x 10 m (35 ft x 35 ft)



Side View

Standard Broad Coverage: 10 m x 10 m (35 ft x 35 ft)



Top View

Optional Barrier Coverage: 10 m x 3 m (35 ft x 10 ft)



SideView

Optional Barrier Coverage: 10 m x 3 m (35 ft x 10 ft)



Top View

Optional Long Range Coverage: 21 m x 3 m (70 ft x 10 ft)



Side View Optional Long Range Coverage: 21 m x 3 m (70 ft x 10 ft)

Technical specifications

Enclosure Design

Dimensions:	10.8 cm x 7 cm x 4.6 cm
	(4.25 in. x 2.75 in. x 1.8 in.)

Environmental Considerations

Temperature (Operating):		+49°C (-20°F to +120°F) sted Applications, 0°C to + 49°C (+32°F to		
Radio Frequency Interference (RFI) Immunity:	No alarm or setup on critical frequencies in the range from 26 MHz to 950 MHz at 50 V/m.			
Mounting				
Height (recommended):		2 m to 2.6 m (6.5 ft to 8.5 ft)		
Location:		Surface or corner mount. Ceiling mount with the appropriate mounting bracket.		
Internal Pointability:		Coverage is adjustable ±10° horizontally, +1° to -18° vertically.		

Outputs

Alarm:	Signals through the multiplex bus
Tamper:	A tamper condition is signaled through the multiplex bus and displays at the keypads.

Power Requirements

Current Draw (two-wire):	LED off: <0.4 mA draw on MUX bus LED on: 2 mA draw on MUX bus
Current Draw (four-wire):	LED off: <0.4 mA draw on MUX bus 0 mA draw on Aux. power LED on: <0.4 mA draw on MUX bus 3 mA draw on Aux. power
Input (Voltage):	Connects directly to the multiplex (MUX) bus of the control panel and optionally to an auxiliary 12 VDC source
Standby Power:	There is no internal standby battery. Connect to DC power sources capable of supplying standby power if primary power fails. For each hour of standby time needed, 0.4 mAh are required. For UL Listed Requirements, four hours (1.4 mAh) minimum are required.

Ordering information

MX934i Multiplex PIR Intrusion Detector

Provides PIR, 10 m x 10 m (35 ft x 35 ft) coverage with multiplex bus interface. Order number **MX934i**

Accessories

B335-3 Swiveling low-profile mount

Swiveling, low-profile, plastic mount for wall mounting. The vertical swivel range is $\pm 10^{\circ}$ to -20° , while the horizontal swivel range is $\pm 25^{\circ}$. Available in triple packs.

Order number B335-3

B338 Universal Ceiling-mount Bracket

Swiveling plastic mount for ceiling mounting. The vertical swivel range is $+7^{\circ}$ to -16° , while the horizontal swivel range is $\pm 45^{\circ}$. Order number **B338**

OMB93-3 Barrier Mirror

Provides barrier coverage with an 11 m x 3 m (35 ft x 10 ft) pattern. Shipped in packages of three. Order number **OMB93-3**

OMLR93-3 Long-range Mirror

Provides long-range coverage with a 21 m x 3 m (70 ft x 10 ft) pattern. Shipped in packages of three. Order number **OMLR93-3**

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