

RCR-REX

Dual technology request-to-exit motion sensor



OVERVIEW

The RCR-REX is a dual technology, request-to-exit sensor used for secure door egress and door access control. The RCR-REX combines the power of passive infrared and Doppler range-controlled radar technologies to provide the industry's most secure request-to-exit sensor.

Historically, request-to-exit sensors have not been used in sensitive areas because they were easy to defeat. With the RCR-REX, dual technology requires that both the unit's PIR sensor and RCR sensor detect intrusion activity in order to trigger the internal relay. For maximum protection, adjust the radar so that the curtain is above the floor; objects slipped under the door will not activate the sensor, making it virtually impossible to defeat.

The sensor has two detection patterns, the infrared PIR and the Range Controlled Radar, that are adjusted independently. Radar range can be adjusted from 3 to 15 feet (1 to 4.5 m) and can be set to just above the floor if desired.

Two Form C output relay contacts are used to switch a door lock and shunt a door switch. The RCR-REX's flexible lock relay may be set to either Fail Safe or Fail Secure mode for operation when the unit is not powered.

The user can determine lock relay activation times with easy-to-change DIP switch settings. Factory default is 1/2 second, but can be adjusted to 1, 2, 4, 8, 16, 32, or 64 seconds.

Depending on the settings chosen by the installer, when the RCR-REX's sounder is turned on, it produces an audible tone to warn of door-open-too-long (DOTL). Closing the door silences the sounder, while new movement restarts the timer and resets the sounder. A beeping tone will sound at the end of the external input signal if the door is open.

An LED indicator turns red for the duration of the lock relay time when motion is detected and flashes twice per second during the 20-second warm-up period. It turns yellow when the radar detects motion, and green when the passive infrared detects motion.

A tamper switch identifies when the housing cover is opened.

STANDARD FEATURES

- Proprietary dual technology — request-to-exit uses both RCR and PIR to detect intruders
- Incorporates two Form C output relay contacts
- Tamper switch detects device open
- Includes mask for easy adjustment of PIR field of view
- Optional single gang wall plate
- Swing open design allows easy adjustment
- Housing available in white, gray, or black
- Built-in adjustable sounder for door position monitoring
- Wall or ceiling mount
- Dual relay outputs

RCR-REX

North America
T 855-286-8889

Latin America
T 561-998-6114

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Specifications

Electrical

Voltage	12 to 30VAC/VDC
Current	23mA typical, 28mA max. @ 12VDC; 15mA typical, 17mA max. @ 24VDC; 31mA typical, 38mA max. at 12VAC; 26mA typical, 29mA max. at 24VAC
Time delay	1/2, 1, 2, 4, 8, 16, 32, 64 sec. at $\pm 10\%$, selectable
Loop type	Open or Closed
Max. loop rating	2A @ 30VDC
Alarm output	DPDT (Form C)
Tamper output	50mA @ 30VDC
Wire gauge	AWG 14 to 22 (18 to 22 recommended)

Features

Radar frequency	5.8 GHz
Range, depth	3 to 15 ft. (0.9 to 4.57 m) adjustable
Range, width	7.9 ft. (2.4 m)
Range, PIR	15 ft. (4.6 m), adjustable

Environmental

Operating temperature	-20°F~120°F (-29°C~50°C)
Relative humidity	0~95% (non-condensing)
RFI immunity	10 V/m @ 80 MHz to 2 GHz
Static immunity	10 kV
Lightning immunity	2.3 kV @ 1.4 J

Physical

Dimensions (HxWxD)	1.76 x 7.395 x 1.85 in. (45 x 188 x 47 mm)
Weight	9.2 oz. (261 g)
Housing material	ABS plastic
Colors	White, black, gray
Mounting height	7 to 15 ft. (2.13 to 4.57 m) typical

Regulatory

FCC, CE, UL, CUL

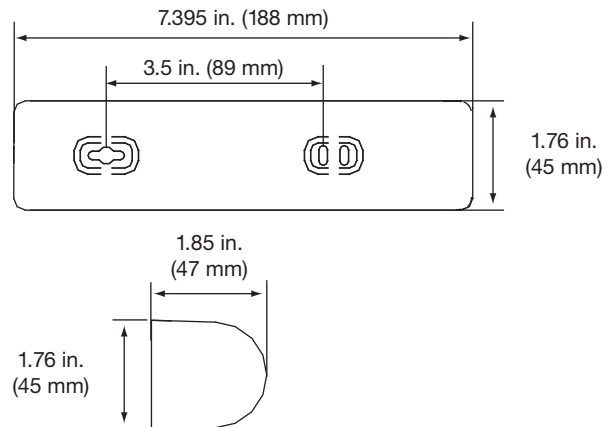
Ordering Information

RCR-REX-W	Dual Technology Request-To-Exit Motion Sensor, DPDT, Form C, Includes Wall Plate, White
RCR-REX-B	Dual Technology Request-To-Exit Motion Sensor, DPDT, Form C, Includes Wall Plate, Black

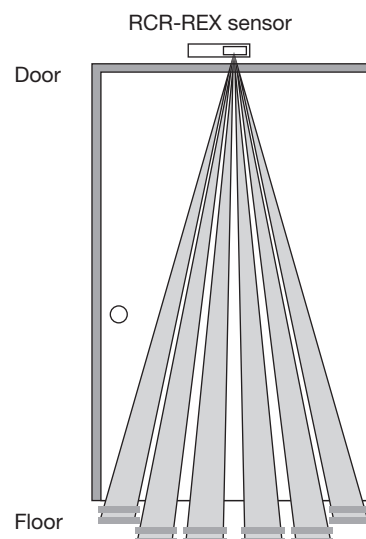
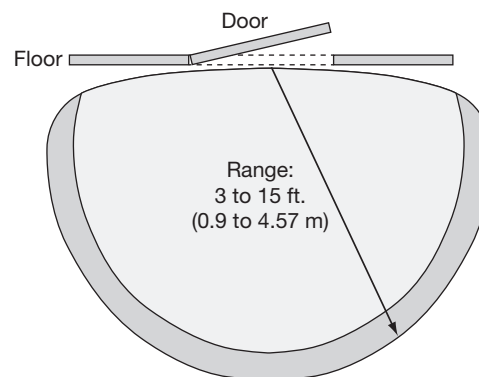
Accessories

RCR-WP-W	Single Gang Wall Plate, 2.25 x 8.375 in. (57 x 213 mm), White
RCR-WP-B	Single Gang Wall Plate, 2.25 x 8.375 in. (57 x 213 mm), Black

Dimensional Diagram



Coverage Patterns



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Specifications subject to change without notice.

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