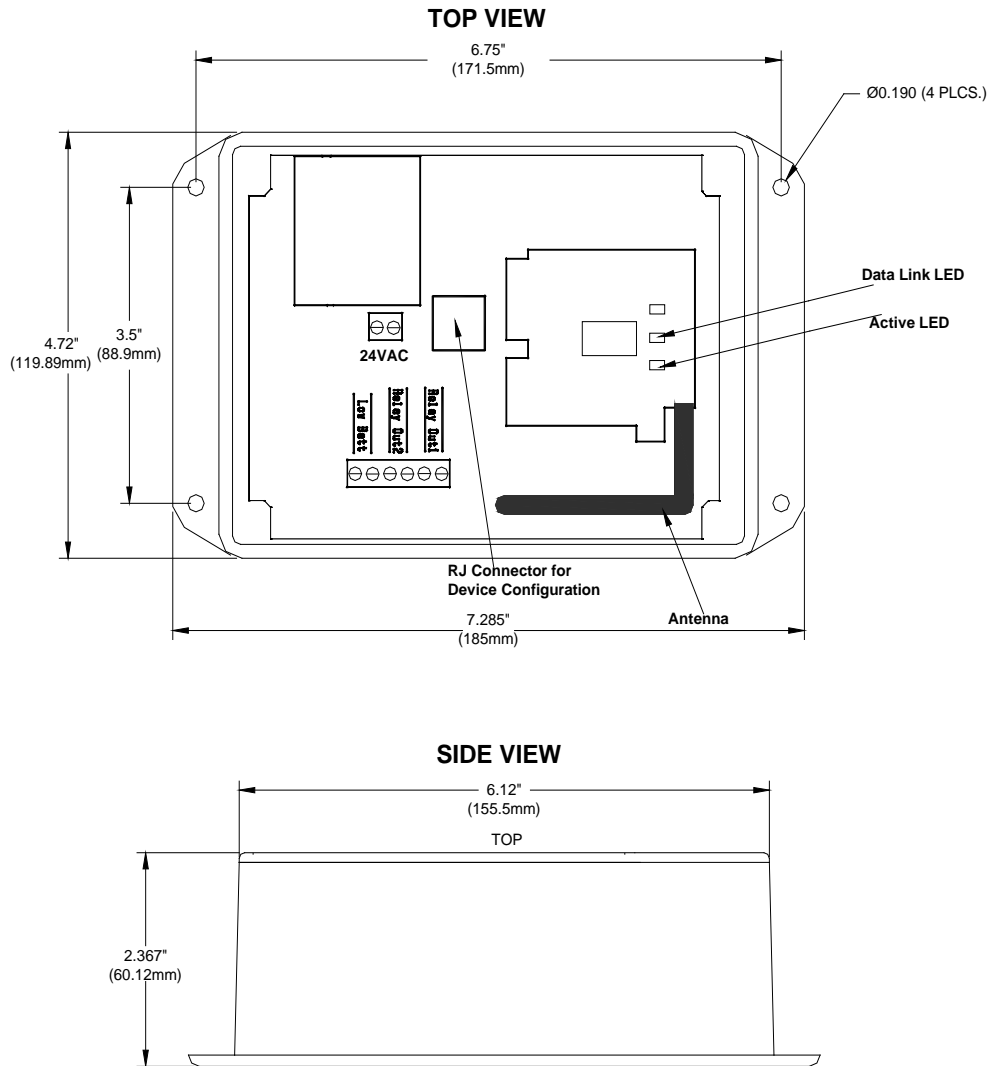




# Installation and Operation Instructions RM2402D Spread Spectrum Output Receivers



**Figure #1**

## General Description

ACI's mesh network Series 2000 RM2402D receiver utilizes reliable Spread Spectrum Mesh Network Radio technology. Together with other ACI Series 2000 sensors and controls, the system can be used to transmit remote sensor readings, status/alarm indications, and control signals wirelessly. Up to two(2) separate wireless sensor transmitters can be used with one RM2402D. It can be used for remote status/alarm indications and wireless on/off control (wireless relay) applications.

The maximum radio transmission distance is dependent on the building type. The maximum open air transmission distance is one mile. In a typical commercial building with steel I-Beam construction, concrete floors with reinforcing rod, and metal stud walls, it can be expected that transmissions will penetrate vertically through floors and horizontally through 200 to 500 feet of walls, furniture and air.

Generally a wireless system will cover at least three floors – one floor above, and one floor below the receiver location. In some buildings with favorable transmission characteristics the system may cover more floors.

Wireless transceiver or repeaters should be installed within 200 to 500 feet of the RM2402D output module.

RR2552 signal repeaters can be installed as needed to increase transmission distance between sensors and receivers.

## Configuration

The RM2402D Receiver can be configured using the RJ connector(as shown in Figure #1) and the configuration software to accept inputs from up to two(2) wireless sensors. Refer to the ACI 2432 Programmer Manual for configuration instruction.

## Installation

Mount the RM2402D Receiver using four #8 screws (mounting dimensions see Figure #1).

Using the RM2402D configuration information, connect the digital outputs to the appropriate control input terminals on the controller or contactor using 20AWG wire.

Connect 24VAC 60Hz to the input terminals using 18-20AWG wire(See Figure #1). Check all connections before applying power to the unit.



### PRECAUTIONS

**SENSORS, REPEATERS AND RECEIVERS SHOULD NOT BE INSTALLED IN THE FOLLOWING AREAS:**

- **INSIDE METAL ENCLOSURE / PANEL**
- **INSIDE OR IMMEDIATELY NEXT TO ELEVATOR SHAFT / ELEVATOR BANKS**
- **IN FRONT OF OR IMMEDIATELY NEXT TO LARGE TREES OR LARGE BODY OF WATER**

**TRANSMISSION DISTANCE AND PERFORMANCE WILL BE DRASTICALLY REDUCED.**



### CAUTION

**DO NOT USE THIS PRODUCT IN ANY SAFETY RELATED APPLICATIONS  
WHERE HUMAN LIFE MAY BE AFFECTED.**

## PRODUCT SPECIFICATIONS

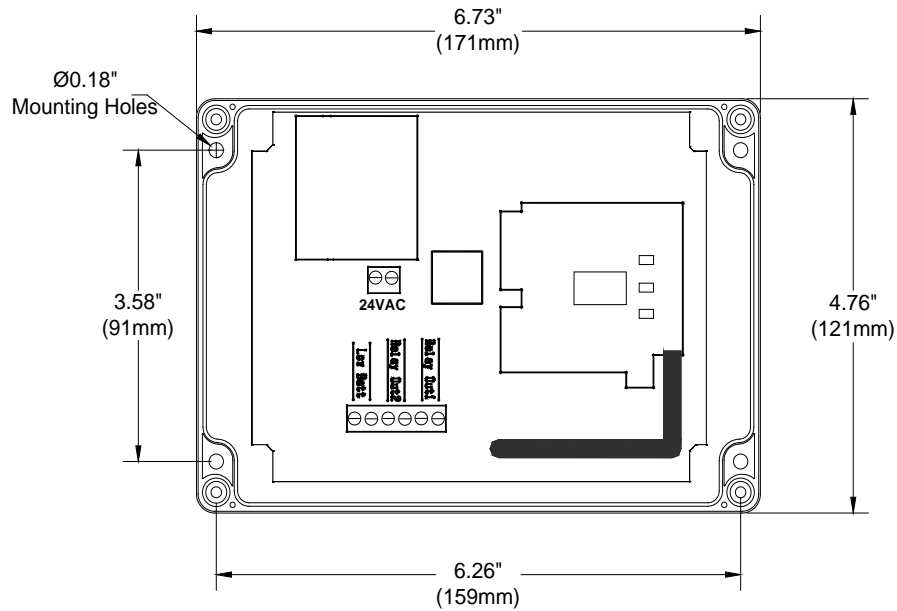
<b>Supply</b>	<b>Voltage</b>	24VAC 60Hz, 300mA nominal
<b>RF</b>	<b>Data Protocol</b>	IEEE 802.15.4-2003/2006
	<b>Operating Frequency</b>	902-928 MHz
	<b>Output Power</b>	+11 dBm
	<b>Receiver Sensitivity</b>	-110 dBm
	<b>Open Field Range</b>	One mile (line of sight)
	<b>Data Transmission Interval</b>	75 seconds (standard)
<b>Input</b>	<b>Digital Output (2 qty)</b>	Pilot Duty Relay Contact Closure
		Contact Rating – 1A @ 24VAC Max
<b>Enclosure</b>	<b>Material</b>	ABS (standard), Polycarbonate (Nema 4X)
	<b>Rating</b>	UL 94 5VA (standard), UL 94 HB (Nema 4X)
<b>Environment</b>	<b>Operating Temperature</b>	32 to 140°F (0 to 60°C)
	<b>Operating Humidity</b>	0 to 95% RH (non-condensing)
<b>Approvals</b>		FCC

## WARRANTY SPECIFICATION

The ACI Wireless Series is covered by ACI's Two (2) Year Limited Warranty, which is located in the front of ACI'S SENSORS & TRANSMITTERS CATALOG or can be found on ACI's web site: [www.workaci.com](http://www.workaci.com).

# RM2402DE

## TOP VIEW



## SIDE VIEW

