



EX2432D OUTPUT EXPANSION MODULE FOR RM2432 RECEIVER

Installation & Operation Instructions

Phone: 1-888-967-5224
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CAUTION:

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

GENERAL INFORMATION

The EX2432D is an expander module designed for use with the RM2432D receiver to add sensors to a system. The EX2432D has four (4) analog and four (4) digital outputs and is powered by the RM2432D. A maximum of two (2) EX2432D expander modules can be added to the RM2432D for a total of 12 analog (0-5 VDC, 0-10 VDC) and 12 digital (dry contact) outputs.

MOUNTING INSTRUCTIONS

Mount the EX2432D Modules next to the RM2432D receiver using four #8 screws (mounting dimensions see **Figure 1**). The RM2432D/EX2432D system should be located as close to the external controller as possible. The maximum wiring distance for the analog outputs is 100 ft.

CONFIGURATION

The sensors need to be configured using the configuration program (included), a laptop, and the CK2432D programming cable. Refer to the RM2432D Configuration Manual for instruction. The CK2432D programming cable is required. A serial to USB adapter might be needed.

WIRING INSTRUCTIONS



CAUTION:

Observe polarity when connecting analog outputs to the controller inputs.

The EX2432D is powered from the RM2432D using the terminals marked A, B, C and on both devices with the maximum wire length of 2'. ACI recommends 16-22 AWG shielded cable or twisted pair wire between the RM2432D and the EX2432D. If a second EX2432D is needed, daisy chain from the first EX2432D.

Select 0-10VDC or 0-5VDC output by moving J4 jumper (see **Figure 1** on RM2432D Installation Instruction).

Using the RM2432D configuration information, connect the analog and digital outputs to the appropriate control input terminals on the controller using 16-26 AWG wire. The controller input connecting to the RM2432D should have a minimum analog input resistance of 20K Ohms. Do no jumper commons for relay outputs.

Note: Always connect the Low Battery (or Lost Sensor) relay contact output (see **Figure 1**) to the appropriate alarm input on the controller.



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.**

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FIGURE 1: ENCLOSURE DIMENSIONS

STANDARD

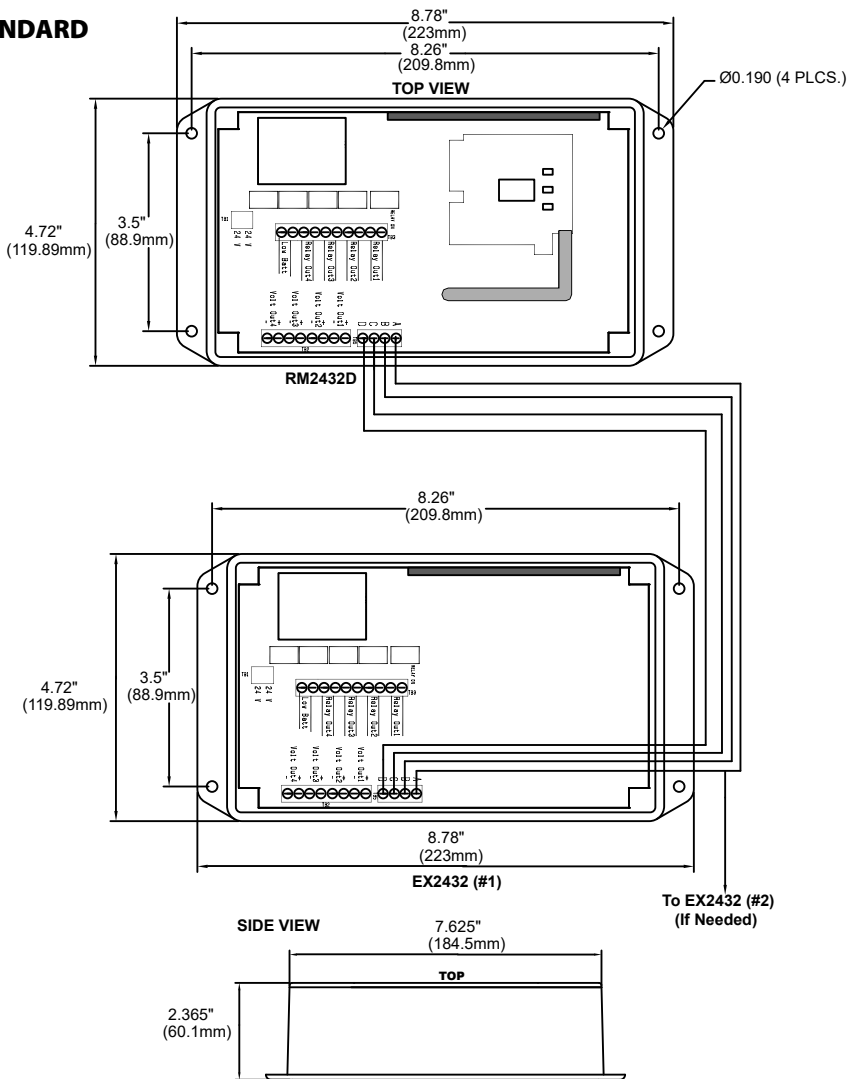
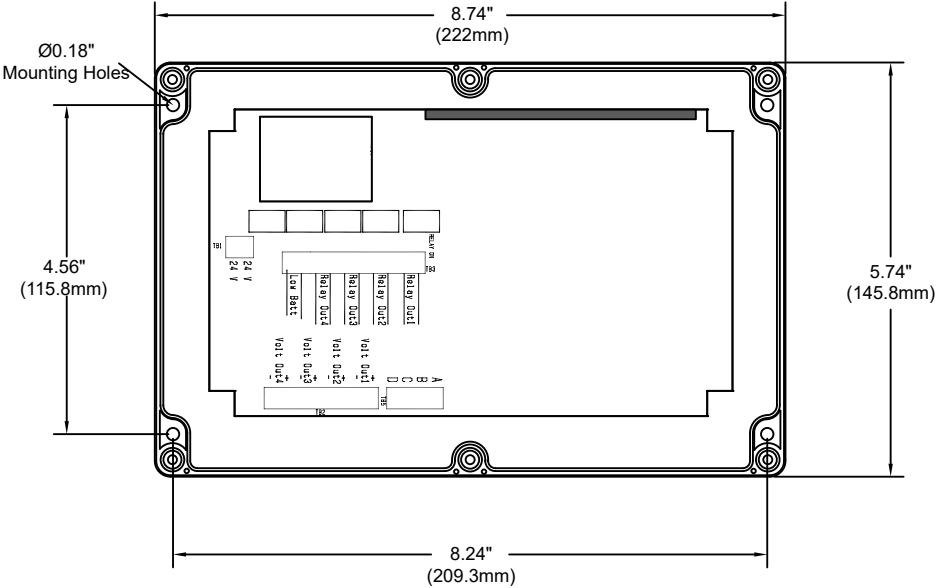


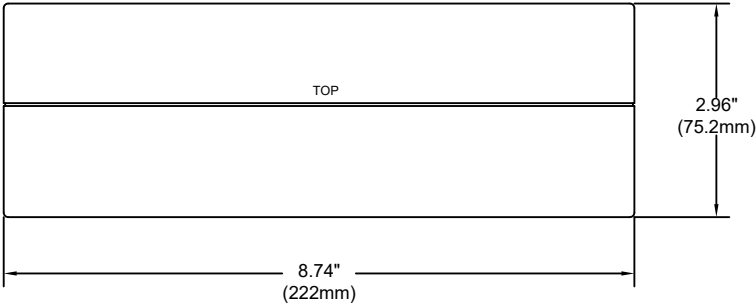
FIGURE 1 (CONTINUED): ENCLOSURE DIMENSIONS

NEMA 4x

TOP VIEW



SIDE VIEW



PRODUCT SPECIFICATIONS

Supply Voltage:	24 VAC, 60 Hz (Full wave rectified) Supplied from RM2432D
Supply Current:	300 mA
Connections:	Screw Terminal Blocks
Wire Size:	16 AWG (1.31 mm²) to 26 AWG (0.129 mm²)
Terminal Block Torque Rating:	0.37 ft-lb (0.5 Nm) Nominal
Operating Temperature Range:	32 to 122°F (0 to 50°C)
Operating Humidity Range:	30 to 50% RH, Noncondensing
Storage Temperature Range:	-4 to 176°F (-20 to 80°C), 70% RH
Data Protocol:	IEEE 802.15.4-2003/2006
RF Characteristics:	900 MHz, Operating Frequency 10 channels between 902 – 928 MHz Transmitter Power: 11 dBm Receiver Sensitivity: -11 dBm
Transmission Distance:	200 – 300 ft horizontally depending on building type and constructions, and typically one floor above and below the transceiver vertically
Digital Outputs:	Four (4) SPDT Pilot Duty Relays, Dry Contact
Contact Rating:	1.0A, 30 VDC @ 104°F (40°C), 0.5A, 125 VAC @ 104°F (40°C) Resistive
Relay Durability:	Mechanical: 5,000,000 operations minimum @ 36K operations/hr Electrical: 100,000 operations minimum (under rated load @ 1.8K operations/hr)
Lost Signal Alarm:	One (1) SPDT, Dry contact relay, 1.0A, 30 VDC @ 104°F (40°C), 0.5A, 125 VAC @ 104°F (40°C) Resistive
Analog Outputs:	Four (4), 0-5/10V jumper selectable
Configuration Software:	Included; Data registers need to be configured prior to use
System Requirements:	• Laptop with Windows 98, XP, Vista, Windows 7 or Windows 10, Ethernet port, and 10GB memory • Direct connection from PC to RM2432D using CK2432D serial to RJ11 programming cable (USB to serial adapter not provided by ACI) • IP Address of PC must have static address of 192.168.0.2 or above
Enclosure Material Flammability Rating:	Standard: ABS Plastic I UL94-5VA NEMA 4X: Polycarbonate Plastic I UL94 HB

WARRANTY

The ACI Wireless Series are 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 website: www.workaci.com.

W.E.E.E. DIRECTIVE

At the end of their useful life the packaging and product should be disposed of via a suitable recycling centre. Do not dispose of with household waste. Do not burn.

