



i³ Series

CRRS-MODA Reversing Relay/Synchronization Module

Specifications

Operating Voltage Range:	8.5 to 35 VDC
Maximum Operating Current:	25mA
Relay Contacts:	2A at 35 VDC
Operating Temperature Range:	32° to 131° F (0° to 55° C)
Operating Humidity Range:	5% to 85% non-condensing
Dimensions:	2½" x 2½" x 1"
Wire connections:	18 AWG stranded, tinned, 16" long

NOTE: In an alarm condition, a wiring-fault trouble state may also register at the panel when the CRRS-MODA is used.

General Description

The CRRS-MODA polarity reversing relay/synchronization module is intended for use with 2-wire and 4-wire i³ series detectors equipped with a built-in sounder, models C2WTA-BA, C4WTA-BA, C4WTAR-BA, and C4WITAR-BA. It is designed to allow all the detectors in the same loop to sound when one of the detectors goes into alarm, and to synchronize their audible output. The CRRS-MODA also allows the silencing of the detector sounders from the alarm control panel.

The CRRS-MODA may be used with an alarm zone that provides coded output for fire and continuous output for burglary. By default the CRRS-MODA's switch is set to "off". Therefore, the CRRS-MODA will only trigger when the alarm output is coded. In this manner, smoke detectors will only sound from the result of a fire, and not from a burglary alarm. In this mode, the detectors will provide a synchronized, coded output.

The CRRS-MODA can also be set to only trigger on continuous alarm zone signals by selecting the switch to "on". In this mode, the detectors will provide a synchronized, coded output.

NOTICE: This manual shall be left with the owner/user of this equipment.

NOTE: If your panel configuration does not match any of the provided wiring diagrams, please contact System Sensor technical services at 1-800-SENSOR2 for assistance.

Installation

Mount module in a 4" square electrical box adjacent to the control panel.



When calculating total current draw of the control panel, remember to add current consumption (25mA) for the polarity reversal relay module (CRRS-MODA).

IMPORTANT: If the fire alarm output signal is coded, set the switch on the CRRS-MODA to "OFF". If the fire alarm output signal is continuous, set the switch to "ON".

Wiring

IMPORTANT: All polarities must be observed!

1. Connect the CRRS-MODA module trigger wire to the fire alarm output terminals.
 - A. Alarm/Bell output: (Figures 1 and 2)
Connect the purple wire to the Alarm or Bell output.
 - B. Alarm relay, normally open contact: (Figures 3 and 4)
 1. Connect one end of the alarm relay contact output to positive auxiliary or detector power fire alarm output.
 2. Connect the purple wire to the other end of the alarm relay contact output.
2. Connect the red and black wires to the panel auxiliary or detector power (red to positive, black to negative).
3. 2-wire models
Connect the yellow and orange wires to the panel initiating circuit (yellow to positive, orange to negative).
4-wire models
Connect the yellow and orange wires to the panel detector power circuit (yellow to positive, orange to negative).
4. 2-wire models
Connect the brown and white wires to the smoke detector power supply input (brown to positive, white to negative).
4-wire models
Connect the brown and white wires to the smoke detector power circuit (brown to positive, white to negative).

NOTE: If your panel configuration does not match any of the following wiring diagrams, please contact System Sensor technical services at 1-800-SENSOR2 for assistance.

Figure 1. 2-Wire system triggered from alarm/bell output:

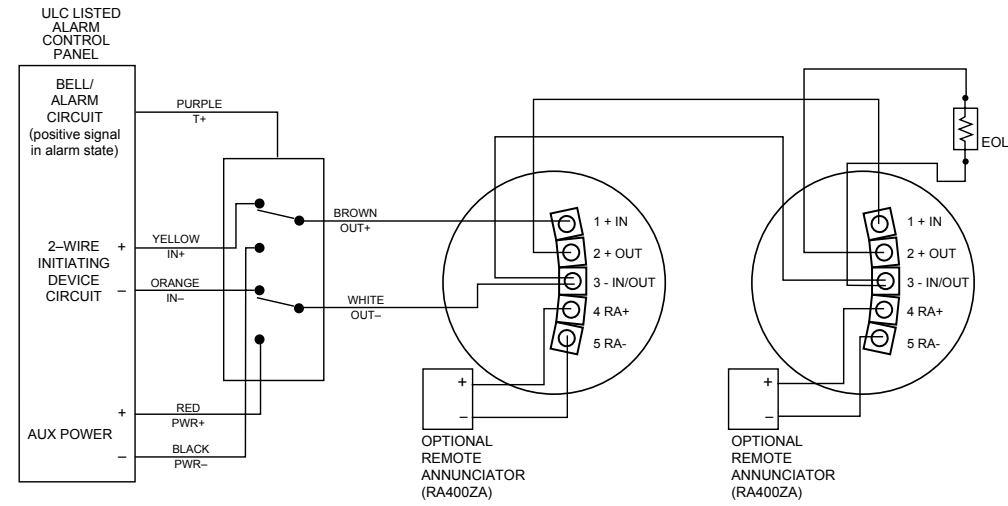


Figure 2. 4-Wire system triggered from alarm/bell output:

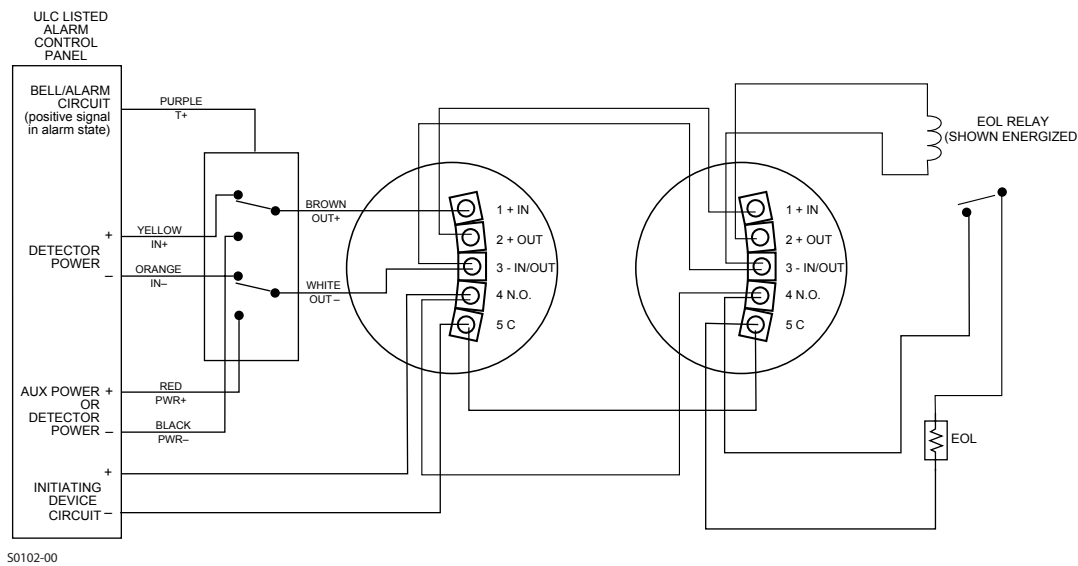
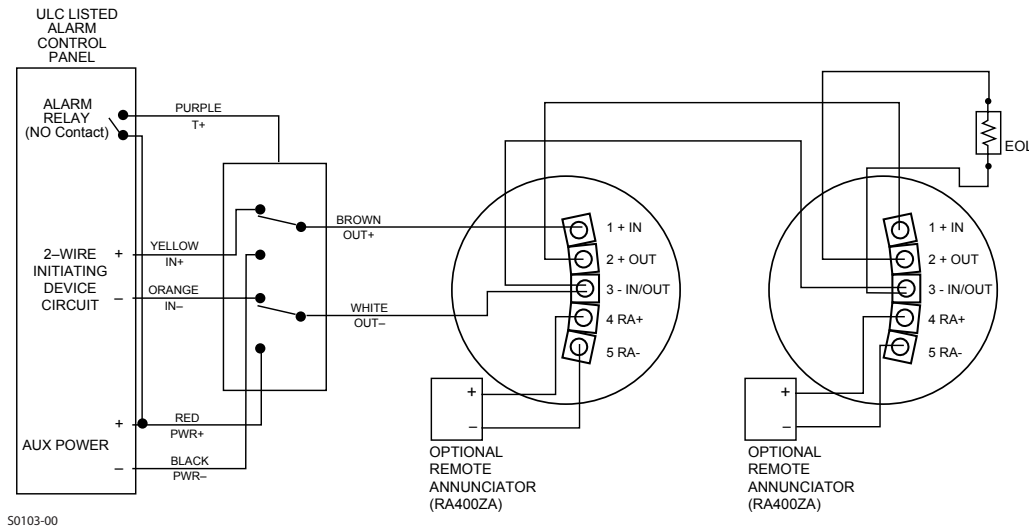
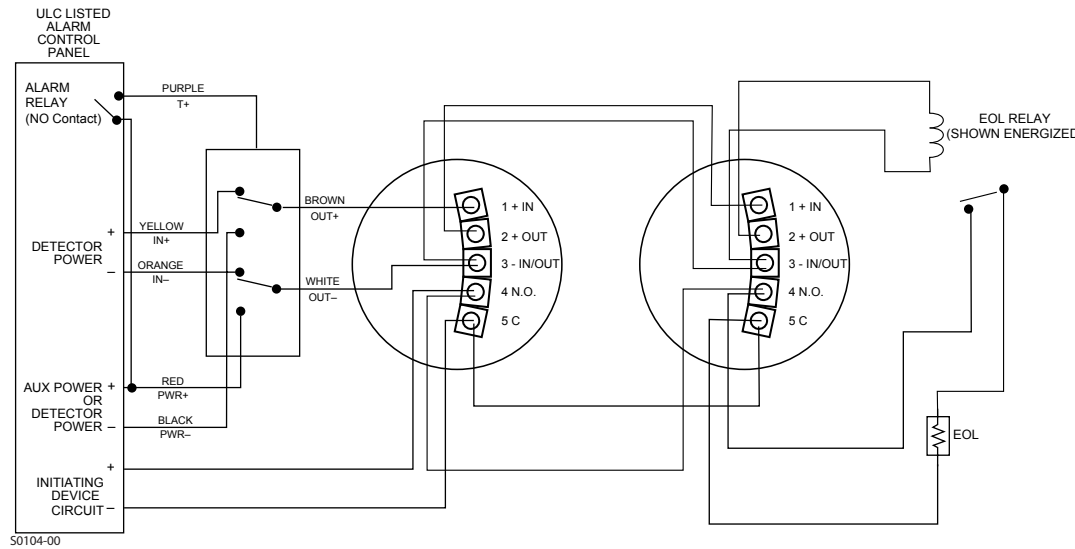


Figure 3. 2-Wire system triggered from alarm relay contact:



50103-00

Figure 4. 4-Wire system triggered from alarm relay contact:



50104-00

Testing

Before testing, notify the proper authorities that the system is undergoing maintenance and will temporarily be out of service

Test in accordance with CAN/ULC S536 test methods, inspections, and testing frequency.

1. Confirm that all smoke detectors connected to the CRRS-MODA module(s) contain a sounder and the sounders are activated upon power reversal.

2. Initiate an alarm with one of the smoke detectors connected to the CRRS-MODA module using any approved test method. In the alarm state, all the detectors connected to the CRRS-MODA module must be sounding their sounders.

3. Reset the system from the control panel. All smoke detector sounders should be silent.

4. If the fire alarm panel also functions in burglary, initiate a burglary alarm and ensure the smoke detectors do not sound.

Three-Year Limited Warranty

System Sensor warrants its enclosed relay module to be free from defects in materials and workmanship under normal use and service for a period of three years from date of manufacture. System Sensor makes no other express warranty for this smoke detector. No agent, representative, dealer, or employee of the Company has the authority to increase or alter the obligations or limitations of this Warranty. The Company's obligation of this Warranty shall be limited to the replacement of any part of the smoke detector which is found to be defective in materials or workmanship under normal use and service during the three year period commencing with the date of manufacture. After phoning System Sensor's toll free number 800-SENSOR2 (736-7672) for a Return Authorization number, send defective units postage prepaid to: System Sensor, Repair Department, RA # _____, 6581 Kitimat Rd., Unit #6,

Mississauga ON, L5N 3T5. Please include a note describing the malfunction and suspected cause of failure. The Company shall not be obligated to repair or replace units which are found to be defective because of damage, unreasonable use, modifications, or alterations occurring after the date of manufacture. In no case shall the Company be liable for any consequential or incidental damages for breach of this or any other Warranty, expressed or implied whatsoever, even if the loss or damage is caused by the Company's negligence or fault. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.