

# RR2 Polarity Reversal Relay Module



**Model**

RR2

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**General Description**

The RR2 Polarity Reversal Relay Module is intended for use with 2-wire and 4-wire detectors with built-in sounder, such as the following System Sensor models: 2100AT, 2112/24AT, 2112/24ATR and 2112/24AITR. Per NFPA requirements, the RR2 is designed to allow all detectors on a loop to sound when one goes into alarm. The RR2 can differentiate between steady and pulsed panel outputs.



**Product Overview**

**Can be used with a single alarm output panel that provides both coded (pulsed) output for fire and continuous output for burglary.**

**Fulfills NFPA 72 requirement for sounder models**

**Designed for use with System Sensor 100 Series sounder models**

**Colored wires facilitate easy installation**

**Compatible with 2-wire and 4-wire smoke detectors**

**Can be used with 12 VDC and 24 VDC systems**

**Plug-in quick disconnects for easy wiring**

**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 95% non-condensing
Dimensions:	2 1/2" x 2 1/2" x 1"
Wire connections:	18 AWG stranded, tinned, 16" long



## Frequently Asked Questions

### Q. What advantage does the RR2 have over the RR1?

A. The RR2 has the ability to differentiate between continuous and pulsed panel outputs and can be used on single output panels.

### Q. What panel types are compatible with the RR2?

A. The RR2 can be used with 2-wire, 4-wire, 12 VDC or 24 VDC single or combination output panels.

### Q. Does the RR2 operate with Ademco panels? Are separate Ademco modules also required?

A. The RR2 operates with Ademco panels and does not require a separate Ademco module.

### Q. Does the RR2 operate with continuous and coded (pulsed) alarm signals?

A. The RR2 offers a field-selectable switch for setting the RR2 for continuous or coded outputs.

### Q. Are there any special wiring instructions to follow with the RR2?

A. Polarity should be observed and the RR2 must be connected to an auxiliary power supply.

### Q. What kind of panel outputs are required for use with the RR2?

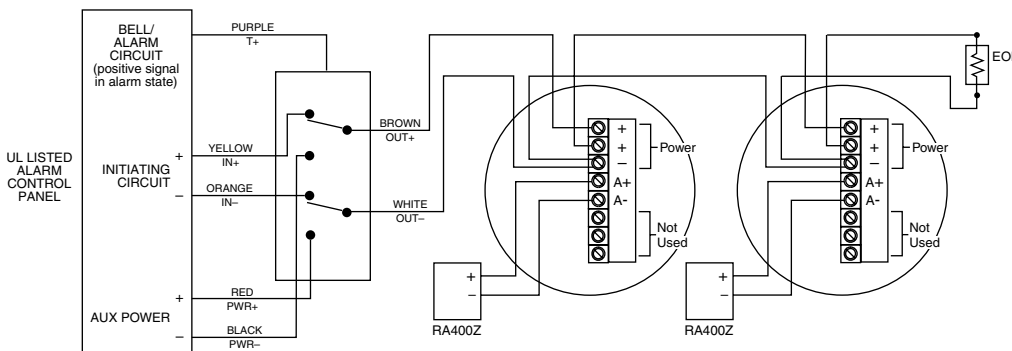
A. The RR2 can be used with fire control panels with a bell/alarm output or an alarm relay output.

### Q. Does the RR2 accommodate more than one 2-wire sounder detector (2100AT) on a loop?

A. Yes, more than one model 2100AT can be placed on a zone when the panel switches to a reverse polarity, non-current-limited auxiliary power supply.\* Refer to wiring diagrams below for specific 2-wire detector wiring.

\* Current supply must be adequate per appropriate calculations.

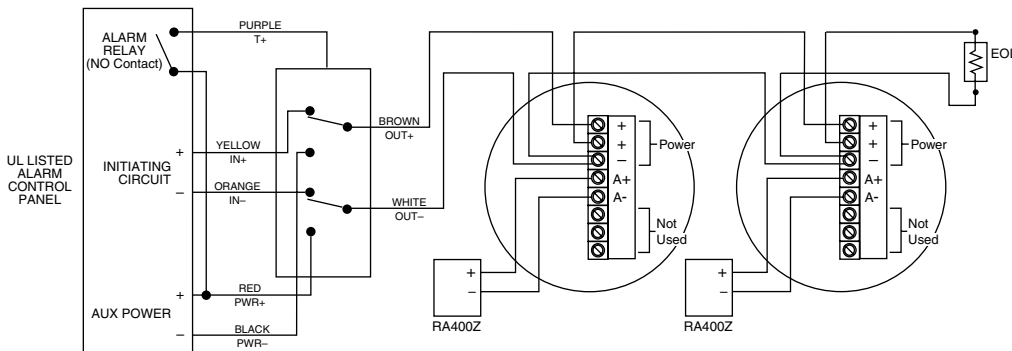
## 2-Wire System Triggered from NAC/Bell Circuit:



### NOTE:

If optional Style D (Class A) wiring is used, a second RR2 module must be added to enable concurrent loop polarity reversal.

## 2-Wire System Triggered from Alarm Relay Contact:



## System Sensor Sales and Service

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### System Sensor Canada

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### System Sensor Europe

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Ph: 613.54.281.142  
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