

# PDRP-1002 Series Agent Releasing Control Panel



## Models Available

PDRP-1002 Agent Releasing Panel

PDRP1002E (International, 230V)

## Optional Accessories Available

4XZM Zone Relay Module

4XTM Transmitter Module

4XLM LED Interface Module

4XMM Volt/Amp Meter

RZA-4X Supervised Remote Annunciator  
*requires LED interface module (4XLM)*

NOTI•FIRE 911A Digital Communicator



## Product Overview

**2 initiating device circuits (Style B/D)**

**2 notification appliance circuits (Style Y/Z)**

**2 release circuits (Style Y)**

**Abort switch input (Style B/D)**

**Manual release input**

**Supervisory input option (Style B)**

**Distinct audible indications for: 1 zone in alarm; 2 zones in alarm; release**

**Power-limited on all circuits except municipal box output**

**Alarm and trouble resound**

**Battery/earth fault supervision**

**Last event recall feature to trap intermittent trouble conditions**

**Fuse protection on all indicating/release circuits**

**Discharge timer: 0, 10, or 15 minutes**

**Disable/enable controls per initiating zone**

**Cross-zone option**

**Features.** Battery/earth fault supervision and fuse protection on all indicating/release circuits. Extensive transient protection. 6.5 AH to 15 AH battery options, up to 90 hours standby. Output circuits protected against false activations by 2-step command sequence and watchdog timer to supervise microprocessor. Last event recall feature to trap intermittent trouble conditions. Non-resettable regulated 24 VDC power output and RMS regulated 24 VDC output power, 2.25 amperes. 230 VAC, 50 Hz international option. 4-wire smoke detector power output. Slide-in labels for zone identification.

**Code Compliance.** Complies with NFPA 71 Central Station Signaling System and NFPA 72 Local, Auxiliary, Remote Station, Control Station, and Proprietary Protective Signaling Systems. Also meets NFPA 12 CO<sub>2</sub> (high pressure only) Extinguishing Systems and both NFPA 12A Halon 1301 Extinguishing Systems, as well as NFPA 12B Halon 1211 Extinguishing Systems. Complies with special abort options for IRI, New York City and other local jurisdictions.

**Optional Meters.** Voltage and current meters (4XMM): The 4XMM provides a voltmeter to measure the voltage across the batteries, and an ammeter to measure the charging current to the batteries.



## General Specifications

### Dimensions:

Door:  
16.125"H x 14.625"W  
Backbox:  
16.0"H x 14.5"W x 4.75"D  
Cabinet:  
16.125"H x 14.625"W x 5.375"D

### Electrical Specifications

120 VAC, 60 Hz, 1.2 A

### Input Terminals

14 AWG with 600 V insulation

## Circuit Specifications

### Input Circuits

1. Detector Zone 1 (Style B/D)
2. Detector Zone 2 (Style B/D)
3. Abort (Style B/D)
4. Manual Release (Style B/D)
5. Supervisory (Style B)

### Output Circuits

1. Notification Circuit 1 (one zone in alarm)
2. Notification Circuit 2 (pulse with two zones in alarm and sound steady on release)
3. Releasing Circuit 1
4. Releasing Circuit 2

### Front Panel Control Switches

- Switch 1— Tone Silence  
Switch 2— Alarm Silence  
Switch 3— Alarm Activate  
Switch 4— System Reset

## Initiating Circuit Specifications

### General

Power-limited circuitry

Operation: Style B (Class B) / Style D (Class A)

### Electrical Specifications

Standby voltage: 24 VDC (ripple = 10 mV peak-to-peak), 5 mA

Alarm current:  
15 mA minimum

Short circuit current:  
40 mA maximum

Maximum detector current in standby: 2 mA (peak) per zone

Maximum loop resistance:  
200 ohms

EOL resistor:  
4.7 Kohms, ½ watt

## Notification/Releasing Circuit Specifications

### General

Power-limited circuitry

### Electrical Specifications

Voltage: 24 VDC RMS regulated (not filtered)

Maximum voltage drop due to wiring: 1.5 VDC

Total current: 2.25 amps max.

Maximum signaling current per circuit: 1.5 amps

Fuses: 2 AG, 4 amps

EOL Resistor: 4.7 Kohms, ½ watt (part no. 71252)

## Terminal Specifications

Four-wire Smoke Detector Power Output Maximum Current: 200 mA

RMS Regulated 24 VDC Power Output Maximum current: 0.5 A (subtracted from notification appliance power dedicated to all output circuits).

Non-resettable 24 VDC Power Output Maximum DC current: 200 mA (subtracted from four-wire smoke power).

## Alarm/Trouble Relays

Dry Form-C contacts rating:  
2.0 amps @ 30 VDC (resistive)  
0.5 amps @ 30 VDC (resistive)

## NFPA Standard Specified Requirements

### Digital Communicator

#### NOTI•FIRE 911A:

For Central Station service (NFPA 72 Central Station Protective Signaling System) or Remote Station Service (NFPA 72 Remote Station Protective Signaling System).

### Transmitter Module (4XTM):

For Local Energy Municipal Box service (NFPA-72 Auxiliary Protective Signaling System):

Supervisory current:  
5.0 mA

### Trip current

0.35 amps (subtracted from indicating appliance power)

### Coil voltage

3.65 VDC

### Coil resistance

14.6 ohms

### Total wire resistance between panel and trip coil

3 ohms

### For Remote Station service (NFPA-72 Remote Station Protective Signaling System):

Maximum current allowed for both circuits shall not exceed 10 mA per circuit.

Reverse polarity output voltage  
24 VDC.

## Optional Boards

The PDRP-1002 has mounting slots for two option boards. Any two of the three option modules may be installed.

### Zone Relay Module (4XZM):

The Zone Relay module provides Form-C general alarm and trouble contacts and the following Form-C relays:

Alarm/Waterflow Bell  
Waterflow/Supervisory Bell  
Releasing Circuit 1  
Supervisory Bell/Release Circuit 2  
One detector in alarm  
Two detectors in alarm  
Releasing Circuit 1 Activated  
Releasing Circuit 2 Activated  
Relays can be silenceable/non-silenceable by jumper

### Transmitter Module (4XTM)

The Transmitter module option provides a supervised output for local energy municipal box transmitter (for NFPA-72 Auxiliary Protective Signaling System) and alarm and trouble reverse polarity (for NFPA-72 Remote Station Protective Signaling System). Also included is a DISABLE switch and disable trouble LED. A jumper option allows the reverse polarity circuit to open with a System Trouble condition if no alarm condition exists.

### LED Interface Module (4XLM):

The module supports the RZA-4X Remote Annunciator module. The LED Interface Module mounts to the main board occupying one of the two option connectors. Annunciator LED wiring is supervised for opens. Faults will activate System Trouble condition.

## Remote Annunciator

### RZA-4X:

The Remote Annunciator mounts on a standard single-gang box and provides the following:

System Trouble LED (yellow)  
Local Piezo Sounder  
Silence Switch (for local sounder)  
Indicating Circuit 1 LED (red)  
Indicating Circuit 2 LED (red)  
Releasing Circuit 1 LED (red)  
Releasing Circuit 2 LED (red)

Note: The Remote Annunciator requires the use of an LED interface module.

## System Sensor Sales and Service

### System Sensor Headquarters

3825 Ohio Avenue  
St. Charles, IL 60174  
Ph: 800-SENSOR2  
Fx: 630/377-6495  
Documents on Demand  
1-800-736-7672 x3  
Web: www.systemsensor.com

### System Sensor Canada

Ph: 905.812.0767  
Fx: 905.812.0771

### System Sensor UK

Ph: 011.44.1403.276500  
Fx: 011.44.1403.276501

### System Sensor in China

Ph: 011.86.295.246.253  
Fx: 011.86.295.246.259

### System Sensor in Singapore

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Fx: 011.65.273.2610

### System Sensor— Far East

Ph: 011.852.2191  
Fx: 011.852.2736.6580

### System Sensor— Australia

Ph: 011.613.54.281.142  
Fx: 011.613.54.281.172