

INSTALLATION AND MAINTENANCE INSTRUCTIONS



B801RA PLUG-IN DETECTOR BASE

**For use with the following detectors:
882 and 885**

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Specifications

Base Diameter:	4.0 inches (102mm)
Base Height:	0.6 inches (14mm)
Weight:	0.08 lb (36 g.)
Mounting:	50 mm box 60 mm box
Operating Temperature Range:	32°F to 120°F (0°C to 49°C)
Operating Humidity Range:	10% to 93% Relative Humidity, noncondensing

Electrical Ratings — includes base and detector

Base And Detector

System Voltage:	12/24 VDC
Maximum Ripple Voltage:	4 Volts peak to peak
Start-up Capacitance:	0.02 μ F Maximum
Standby Ratings:	8.5 VDC Minimum; 35 VDC Maximum 90 μ A Maximum
Alarm Ratings:	4.2 VDC Minimum at 10 mA; 6.6 VDC Maximum at 130 mA (Alarm current must be limited to 100 mA (or more) by the control panel. If used, the RA100Z remote lamp operates within specified detector alarm currents.)
Reset Voltage:	2.5 VDC Minimum
Reset Time:	0.3 Seconds Maximum
Start-up Time:	35 Seconds Maximum

Before Installing

Please thoroughly read this manual, Copies of this manual are available from Xi'an System Sensor.

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

IMPORTANT: The detector used with this base must be tested and maintained regularly following NFPA 72 requirements and China standard GB J116. The detector used with this base should be cleaned at least once a year.

General Description

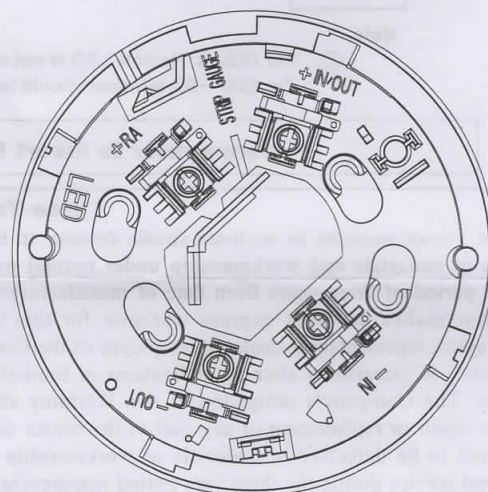
This B801RA plug-in detector base is used with System Sensor smoke and heat detector heads. The capability of plugging these detectors into a variety of special bases makes them more versatile than equivalent direct-wired models.

The B801RA base is intended for use in 4-wire systems, with screw terminals provided for power and remote annunciator connections.

Mounting

Figure 1 shows mechanical mounting details. These detector bases mount to typical junction boxes. Attach the base to the box using the screws supplied with the junction box.

Figure 1. Terminal layout:



Installation Guidelines

All wiring must be installed in compliance with applicable codes and the authority having jurisdiction. Proper wire gauges should be used. The conductors used to connect smoke detectors to control panels and accessory devices should be color-coded to reduce the likelihood of wiring errors. Improper connections can prevent a system from responding properly in the event of a fire.

For signal wiring (the wiring between interconnected detectors), it is recommended that the wire be no smaller than 18 gauge. Wire sizes up to 12 gauge may be used with the base. For best system performance, the power +IN/OUT, -IN and -OUT loop wires should be twisted pair and installed in separate grounded conduit to protect the loop from extraneous electrical interference.

Smoke detectors and alarm system control panels have specifications for allowable loop resistance. Consult the control panel manufacturer's specifications for the total loop resistance allowed for the control panel being used before wiring the detector loops.

CAUTION: Do not loop wire under terminals. Break wire run to ensure supervision of connections.

Wire connections are made by stripping about 3/8" of insulation from the end of the wire (use strip gauge

molded in base), sliding the bare end of the wire under the clamping plate, and tightening the clamping plate screw.

Two-wire initiating devices receive their power from the initiating circuit of a control panel. Electrical specifications of the control panel and the detector-base combination must be compatible for the system to function properly.

The zone wiring of the detector bases should be checked before the detector heads are installed.

Tamper-resistant Feature

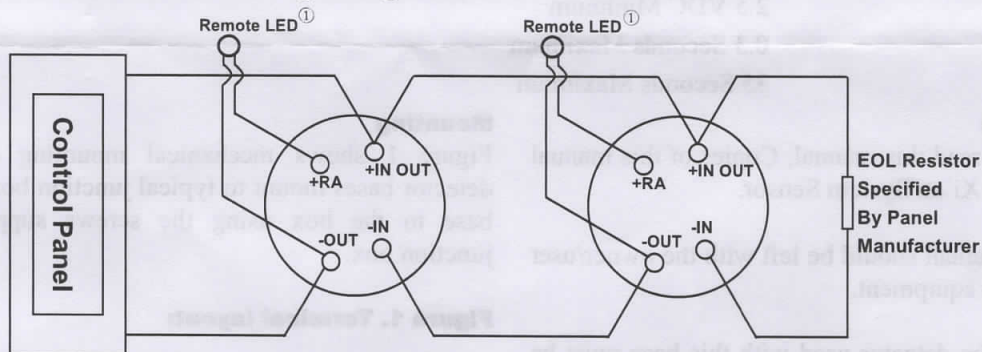
This detector includes an optional tamper-resistant feature that prevents its removal from the base without the use of a tool.

To make the detector tamper-resistant, remove the smaller tab by breaking it at the scribed line on the tamper-resistant tab before installing the detector (see Figure 3).

The tamper-resistant tab is on the detector mounting base. To remove a tamper-resistant detector from the base, use a pocket screwdriver, or similar tool, to depress the tamper-resistant tab and turn the detector counterclockwise. The tab is accessible through the slot on the mounting base.

The tamper-resistance feature can be defeated by breaking and removing the plastic lever from the base. However, this permanently disables the tamper-resistance feature.

Figure 2. Typical 2-wire detector wiring configuration:



Note:

- ① For 882: If Remote LED is not used, +RA terminal should be free and polarity of these terminals may be reversed. For 885: +RA terminal should be free and polarity of these terminals may be reversed.

Please refer to insert for the Limitations of Fire Alarm Systems

Three-Year Limited Warranty

Xi'an System Sensor warrants its enclosed smoke detector to be free from defects in materials and workmanship under normal use and service for a period of three years from date of manufacture. Xi'an 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 repair or 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 Xi'an System Sensor for a Return Authorization Number and faxing a copy of the filled form of

CUSTOMER RETURNS with authorized RA# to Xi'an System Sensor, send defective units with a copy of the form postage prepaid to: Xi'an System Sensor Electronics, Ltd./ 28 Tuan Jie South Road/ Xi'an National Hi-tech Industrial Development Zone, 710075/ China. 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.