

## DESCRIPTION

The System Sensor 1151 low profile ionization type smoke detectors are specifically designed to meet the performance requirements of fire detection/alarm systems. The 1151 ionization detector uses a state-of-the-art, dual unipolar sensing chamber. The detector is designed to provide open area detection and, when installed in a two-wire base, is compatible with FCI fire alarm control panels. The detector's operation and sensitivity can be tested in place.

The 1151 detector is of plug-in construction and plugs into the same base as the System Sensor 2151 photoelectric smoke detector, making both models interchangeable. Bases are available for two-wire, four-wire, 120 VAC four-wire operation and also with an audible sounder.

Two visible LEDs on each detector flash every ten seconds indicating that power is being applied to the detector. The LEDs light steadily when the detector is in alarm. A remote LED annunciator is available as an optional accessory.

The 1151 detector is Listed for use inside ducts up to a velocity of 500 FPM.

Functional testing is performed by placing a test magnet against the cover. The LED on the detector should light within 30 seconds.

Field metering of detector sensitivity may be performed with the aid of a voltmeter and Test Kit, MOD 400R.



## FEATURES

**Unique Dual Unipolar Sensor  
Provides Exceptional Stability**

**Low Profile Construction**

**Easy plug-in of the Head to Base**

**Tamper-resistant Feature**

**Test Switch**

**360° View Angle Of Alarm LEDs**

**Compatible with FCI Control Panels**

**Audible Sounder Base (Optional)**

**Field Metering of Detector Sensitivity**

**Removable Insect Screen and Cover  
for Field Cleaning**

**Insect-resistant Screening  
(.020"/.508 mm openings)**

## APPROVALS



## SPECIFICATIONS

Sensitivity	1.9 %/ft. (nominal)
Operating voltage	15 - 32 VDC peak
Standby current	200 uA max. avg.
Operating temperature	32 to 120° F (0 to 49° C)
Relative humidity	10 to 93 % (non-condensing)
Air velocity	500 feet per minute maximum
Construction	Off-white flame retardant plastic
Diameter	4 inches (10.2 cm)
Height	1.7 inches (4.2 cm)
Weight	3.6 oz. (104 g)

Specifications are provided for information only, are not intended to be used for installation purposes, and are believed to be accurate. However, no responsibility is assumed by Fire Control Instruments, Inc. for their use. Specifications subject to change without notice.

© 2003 All Rights Reserved

## MOUNTING

On a 4-inch square box with or without plaster ring. Minimum depth 1.5 inches.

On a 3.5-inch octagonal box. Minimum depth 1.5 inches.

## INSTALLATION

Place the detector into the detector base. Turn the detector clockwise until the detector locks into place.

To use the tamper-proof feature, break the smaller tab on the scribed line in the tamper proof tab located on the detector mounting bracket. Install the detector. To remove the detector from the base when using the tamper-proof feature, insert the blade of a small screwdriver into the hole on the side of the base and push the plastic lever away from the detector head. This will allow the detector to be rotated counterclockwise for removal. **NOTE:** The decorative ring must be removed in order to remove the head when using the tamper-proof feature.

The tamper-proof feature may be defeated permanently by breaking the plastic lever off the base.

**NOTE:** The number of two-wire smoke detectors which can be accommodated per zone varies with different control panels. **Consult the control panel instruction manual to determine the capacity.**

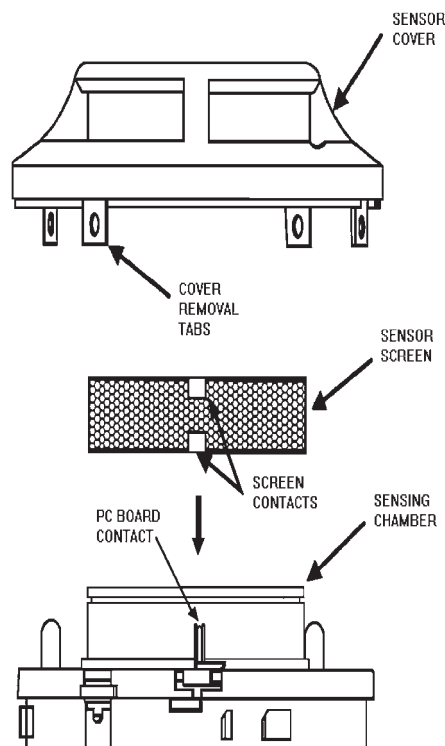
Refer to NFPA 72, Chapter 5-3, "Smoke Sensing Fire Detectors" for spacing, location of detectors and other guidelines.

## TESTING

Detectors may be tested in the following ways:

Place a test magnet against the detector as directed in the installation instructions. The detector should go into alarm within 30 seconds.

Field metering of detector sensitivity may be performed with the aid of a voltmeter and Test Kit, MOD 400R. For the complete procedure, refer to the Installation and Maintenance Instructions furnished with each detector.



## MAINTENANCE

Cleaning programs should be adapted to the individual environment. We recommend at least an annual cleaning of the unit. The detector screen and cover assembly can be removed, revealing the sensing chamber. A vacuum cleaner can be used to remove dust from the screen, cover and sensing chamber. For the complete procedure, refer to the Installation and Maintenance Instructions furnished with each detector.

## ORDERING AND TECHNICAL INFORMATION

Model	Contacts	Description
1151		Ionization Detector
B110LP		Base, Two-wire
B112LP	Form A & C	Base, four-wire, 24 VDC operation
B114LP	Form A, C & Supv.	Base, four-wire, 120 VAC operation
B401BH		Base, four-wire, with audible sounder
RA-400Z		Remote Alarm Indicator
PAM-1	Form B	End of Line Relay, 24 VDC
MOD 400R		Test Kit