



Description

The MIR-1400A ionization type smoke detector is specially designed to meet the stringent performance requirements of industrial and municipal fire detection/alarm systems. The design of the detector emphasizes ease of installation and field maintenance.

All MIR-1400A ionization smoke detectors contain a unique dual source, dual unipolar chamber detection design which will sense the presence of smoke particles produced by fast combustion as well as slow smouldering fires. This chamber exhibits increased stability, significantly reduces nuisance alarms and provides better performance at higher air velocities. The MIR-1400A is designed to meet the performance criteria required by U.L.C. Additional key features include a blinking LED standby status indicator, an easily visible alarm indication and provision for convenient field test and metering.

Features

- Unique dual unipolar sensor
- Exceptional stability
- Factory preset at 1.5% normal sensitivity
- Withstands wind gusts up to 2500 feet-per-minute without false alarming
- Removable cover for field cleaning
- Visible LED "blinks" in standby
- Sealed against dirt, insects and back pressure
- 3 year warranty
- 8.5-35 VDC operating range
- Field metering of detector sensitivity
- Built-in test switch
- Low standby current
- Built-in tamper-resistant feature
- Designed for direct surface or electrical box mounting
- Remote LED option
- Insect-resistant screening
- SEMS screws for easy wiring

Application

The MIR-1400A ionization detector is designed to be compatible with all Mircom Fire Alarm Control Panels. It is a low voltage detector and can be intermixed on the same detection circuits. It is recommended that no more than 30 detectors of any combination or type be used on any one (1) circuit. The detector is ULC listed and may be used where incipient products of combustion can be anticipated as a source, dependent on the particular environmental conditions. It is recommended that good engineering judgement is applied regarding location and spacing.

General Specifications

Control Panel Applications	2-wire
Visual LED Local Alarm	YES
Remote LED Annunciator Capacity	YES
Operating Voltage Range	8.6-35VDC
Current Limits	
a) Standby (max)	100mA
b) Alarm Current (typical)	See NOTE
c) Alarm Current (maximum)	See NOTE
Alarm Signal	Shunt on power leads
Note: Two-wire control panels must limit current to 100 mA or less.	



Architects/Engineer Specifications

The detector shall have a dual chamber ionization sensor of the dual unipolar type. The sensor shall have a nominal sensitivity as measured in a ULC smoke box. It shall be possible to perform a calibrated sensitivity and performance test on the detector without the need of generating smoke. The test method shall test all detector circuits.

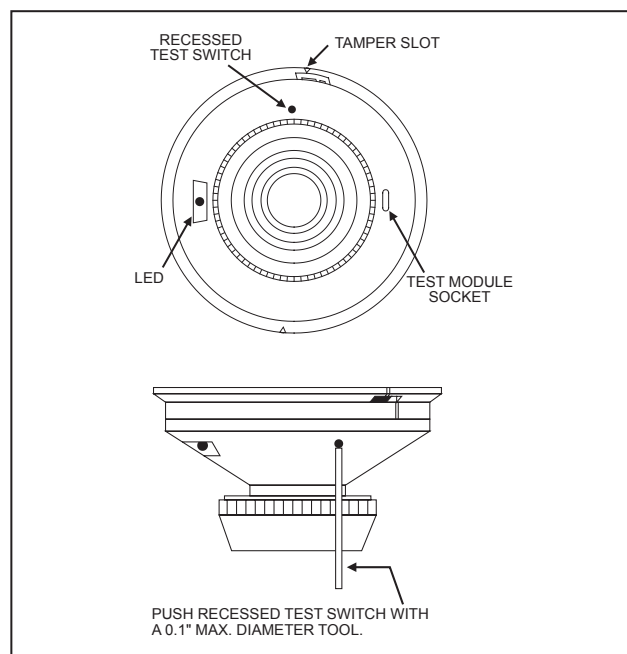
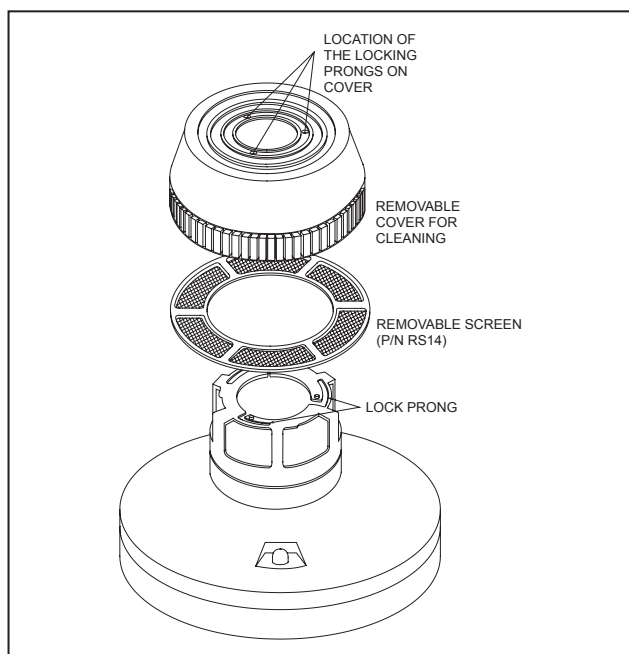
The detector shall incorporate a solid state voltage regulator which can maintain detection sensitivity over an input voltage of 8.5-35 VDC. Standby current shall be no more than 100 microamps. Current limiting shall protect the detector against power surges and noise protection circuitry shall protect the detector so it can be wired without conduit, where codes allow.

The detector shall have a mounting bracket that allows for direct surface mounting or mounting to a 3 1/2" or 4" octagon box. A visual indication of an alarm shall be provided by a latching light emitting diode (LED) on the detector which may be seen at ground level.

It shall flash every ten seconds indicating that power is applied to the detector. The visible alarm signal shall be capable of remote LED annunciation.

A special test meter shall be available to check the sensitivity of the detector. Metering points for the test meter shall be accessible on the exterior of the detector. The detector shall not alarm when exposed to wind gusts up to 2500 feet per minute. The detector screen and cover assembly should be easily removable for field cleaning. Wire connections are made by clamping plate and screw. The detector shall be supplied by Mircom.

The MIR-1400A has been designed to seal the sensing chamber from back pressure air flow, dust, dirt, and insects. The back of the detector is sealed and the chamber is protected by a fine mesh. (.20:/508 mm) screen. If cleaning is required, it is easy to remove the cover (with a tool) and obtain access to the screen and chamber to perform a thorough cleaning. Replacement screens, part number RS14, are available.



Ordering Information

MIR-1400A	Ionization detector, 2-wire, surface mount
RA-400Z	Remote annunciator for 2-wire systems. Fits standard single gang box.
MOD400R	Field test module
RS14	Replacement screen for 1400
CRT400	Cover removal tool for 1400

NOT TO BE USED FOR INSTALLATION PURPOSES.



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