General Description

The RSR-100 remote sensitivity meter is a tool to measure the sensitivity of SD-100 Series smoke detectors. This battery-powered device is equipped with an infrared optical interface for reading data automatically sent by the smoke detector every 5 seconds. The SD-100 decodes the sensitivity and status data, and displays the information on its LCD display.

The RSR-100 may be used either as a hand-held device, or with a standard threaded extension pole.

IMPORTANT: Use of the RSR-100 is designed to "...assure that each smoke detector is within its listed and marked sensitivity range..." per NFPA 72. The RSR-100 CANNOT, however, initiate a detector/sensor alarm. Sensitivity testing shall not be used as a substitute for alarm testing.

RSR-100 Operation

1. Turn the RSR-100 on by pressing and holding the button for approximately 2 seconds until the meter sounds and the LCD displays the word "READY". The "READY" status indicates that the RSR-100 is ready for accepting data from the SD-100 Series smoke detector.
2. Place the remote sensitivity meter over the IR LED on the smoke detector being tested, which is close to the words "DO NOT PAINT". (See Figure 1), Position the meter either vertically or at an angle (see Figure 2).
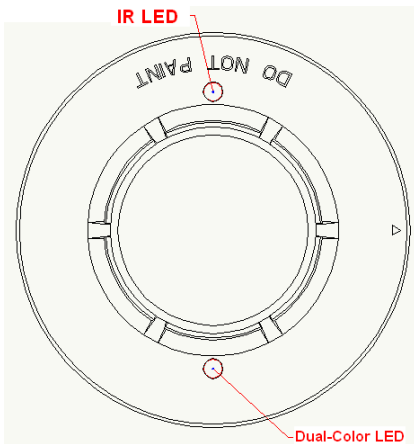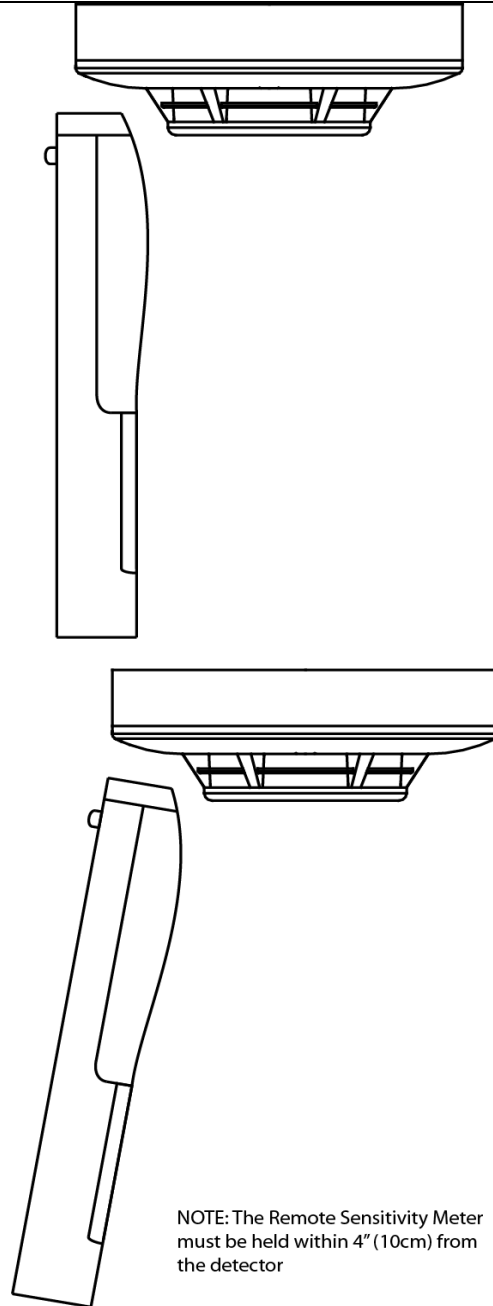

Figure 1: Meter location on
SD-100 Series Detector

3. Hold the remote sensitivity meter in this position up to 10 seconds until the meter sounds and the meter's red LED illuminate.
4. The LED and sounder indicate a valid reading is received. The Meter reading and stats for the detector will be automatically displayed on the reader (See Table 1). The Meter will continue to display this information for up to 8 minutes or until the meter is reset.

NOTE: The Remote Sensitivity Meter must be held within 4" (10cm) from the detector

NOTE: No further readings may be taken until the reader is reset.

5. To measure the sensitivity of the next detector, reset the meter by momentarily pressing the button. The LCD will again display the word "READY". Repeat step 2, 3 and 4, as necessary.
6. When finished, turn off the reader by pressing and holding the button for approximately 2 seconds until the reader sounds and LCD turns off.

Table 1: RSR-100 Status Indications

Indication	Action
GOOD	The detector is within its sensitivity range. No action is necessary at this time.
SERVICE	The smoke detector's sensing chamber requires cleaning for continued reliable operation. Refer to the SD-100 Series installation and maintenance instructions for proper maintenance procedures.
REPLACE	The smoke detector failing and should be replaced immediately.

NOTE: When the batteries in the RSR-100 get low, the LCD display will read "LOW BATT". Once the low battery condition is reached, the reader will no longer function. Replace batteries to restore operation of the RSR-100.

The RSR-100 automatically turns off when not used after 8 minutes. To conserve the battery life of the Remote Sensitivity Meter, it is recommended that the reader be turned off when not in use. To turn off the meter, press and hold the button for approximately 2 seconds until the reader sounds.

Specifications
Power supply: two AA alkaline batteries
Operating Temperature: 0 to 37.8°C
Storage Temperature (without batteries): -15 to 60°C
Operating Humidity: 10 to 90% RH non-condensing or icing

WARNING
The Limitations of the RSR-100

The RSR-100 is designed to "... assure that each smoke detector is within its listed and marked sensitivity range ..." as per NFPA 72. The RSR-100 CANNOT, however, initiate a detector/sensor alarm. Therefore, the meter meets only part of NFPA 72 testing standards.

Slight fluctuations in readings may be experienced on any device at any given time and do not indicate a defect or sensitivity shift, provided the reading is within the specified range. These fluctuations are to be expected. The RSR-100 and its associated smoke detectors/sensors contain electronic parts and, though they are designed to last over 10 years, any of these components can fail at any time. Therefore, it is recommended to test your smoke detectors/sensors as per NFPA 72 at least semiannually. Regular cleaning and testing of your fire detection system will measurably reduce your product liability risks and minimize nuisance alarms.

MIRCOM GROUP OF COMPANIES			
NO.	LT-1146	Revision	1
Title	RSR-100 Remote Sensitivity Meter Operating Instructions		
Confirmed	Author	Date (YY-MM-DD)	
		2012-09-06	