PERTRONIC INDUSTRIES LTD System Sensor Detector Sensitivity Reader (SENS-RDR)



Modified Operating Instructions for NZ

Compatibility

The SENS-RDR sensitivity reader is a tool to measure the sensitivity of System Sensor model **2151BPI** conventional photo-electronic smoke detectors only. The SENS-RDR sensitivity reader can also be used with the (v) series smoke detectors, but it CANNOT be used with other models/types of conventional smoke detectors.

During the Annual Survey of any fire alarm system, NZS4512:2003 Clause 603.3 (b) requires that "Smoke detectors shall be sample tested by checking the sensitivity of a minimum of 20% of the detectors...".

The SENS-RDR is a quick and convenient tool to meet this requirement with **2151BPI** smoke detectors.

SENS-RDR Operation

- a) Turn the reader ON by pressing and holding the button for approximately two seconds until the reader sounds. The LCD will display the word "READY." This indicates the reader is ready to accept data from a 2151BPI smoke detector.
- b) Place the reader against the 2151BPI detector being tested. Position the reader on an angle at a point midway between the two LED's where there is a small dimple in the detector case at the base of one of the four "shoulder" supports for the detector's top plate.



c) Hold the reader in this position for up to ten seconds until the reader sounds and the reader's red LED illuminates.

Note: If the reader does not sound after ten seconds, verify that the reader is properly positioned, and the LCD displays "READY."

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- d) The LED and sounder indicate a valid reading is received. The reader automatically displays two results:
 - The first is a percent-per-foot obscuration measurement—this displays for approximately three seconds.

• The second is a status indication in English text (refer to Table 1). The reader continues to display both results for up to 30 minutes or until the reader is reset.

- e) To measure the sensitivity of the next detector, reset the reader by momentarily pressing the button. "READY" will be displayed on the LCD again. Repeat steps b) through d), as necessary.
- f) When finished, turn the reader OFF by pressing and holding the button for approximately two seconds until the reader sounds.

Status Indication	Action
GOOD	The detector is within its sensitivity range. No action
	is required at this time
SERVICE	The detector's sensing chamber requires cleaning for continued reliable operation. Refer to the 2151 Installation Manual for correct maintenance procedures.
REPLACE	The smoke detector is failing and should be replaced immediately!

Table 1

The SENS-RDR cannot initiate a detector/sensor alarm. Sensitivity testing shall NOT be used as a substitute for alarm testing!

SENS-RDR Batteries and Battery Life:

The SENS-RDR operates with two AA alkaline batteries. Other battery types may result in improper function of the reader.

When the batteries get low, the LCD displays 'LOW BATT'. Once the low battery condition is reached, the reader will no longer function – restore batteries to restore operation to the SENS-RDR.

The SENS-RDR automatically turns OFF when not used for 30 minutes. To conserve battery life, it is recommended the reader be turned OFF when not in use.

Refer to the System Sensor Instruction sheet for additional information.