

Installation Manual SCM-4 Single Contact Module



NOTICE TO THE INSTALLER

This manual provides an overview and the installation instructions for the Single Contact Module (SCM-4). This module is only compatible with addressable fire systems that utilize the Potter/Nohmi addressable protocol.

All terminals are power limited and should be wired in accordance with the requirements of NFPA 70 (NEC) and NFPA 72 (National Fire Alarm Code). Failure to follow the wiring diagrams in the following pages will cause the system to not operate as intended. For further information, refer to the control panel installation instructions.

The module shall only be installed with listed control panels. Refer to the control panel installation manual for proper system operation.

1. Description

The SCM-4 module is used to monitor the contact status of an initiating device that contains a single normally open contact. The SCM-4 can be programmed in the panel to supervise a Normally-open contact on the Fire Alarm Control Panel (FACP). When the Normally-open contact is selected, and the contact is shorted or closed, the SCM-4 reports its condition to FACP. The SCM-4 supervises an open circuit of wiring connected to the terminal C and NO.

The SCM-4 employs one red LED to indicate the status. In normal condition, the LED flashes. When the contact is activated, the LED will turn on constantly. In case of open circuit, the LED will turn off.

The system allows maximum 13 points illuminating constantly therefore if additional devices are in the alarm condition, the LED will flash rather than latch on steady.

2. Setting the Address

Each addressable module, smoke sensor, heat detector and combination sensor/detector must have the address set prior connecting the device to the SLC loop. The address is set using the hand held device programmer.

Prior to connecting a device to the SLC loop, the following precautions should be taken to prevent potential damage to SLC or device. Verify the following before proceeding. Document discrepancies and notify appropriate personnel.

1. Power in the Addressable Module is removed
2. Field wiring on the module is correctly installed.
3. Field wiring has no open or short circuits.

3. Wiring diagram

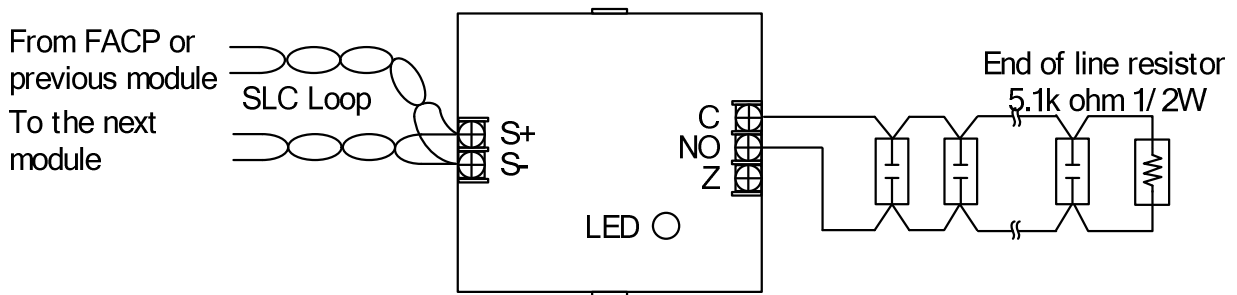
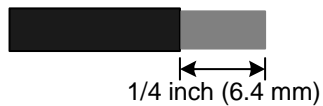


Figure 1: Wiring diagram in case of supervising Normally-open contact

Note:

- 1) SLC wiring style is applicable to the NFPA Class A (Style 6, 7) & Class B (Style 4).
- 2) IDC wiring style is applicable to the NFPA Class B (Style B).
- 3) SLC loop wiring (S+, S-) and initiating device wiring (C, NO) are power limited.
- 4) Wiring for terminals S+, S- are supervised.
- 5) Wiring for terminals C, NO are supervised.
- 6) Z terminal is not used. (No connection)
- 7) This addressable module does not support 2-wire detector.
- 8) All wiring is between #14 (2.08 mm²) (max.) and #22 (0.32 mm²) (min.).
- 9) Wire Preparation
Strip all wires 1/4 inch from their edges as follows:



Note:

- a) Stripping too much insulation may cause ground fault
- b) Stripping too little may cause a poor connection and subsequently an open circuit

4. Installation Instructions

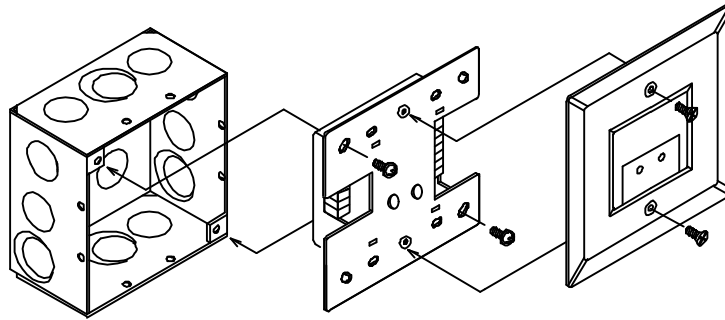


Figure 3: Installation in the compatible electrical box

5. Specifications

No.	Item	Specification
1	Rated voltage range of SLC input power (S+,S-)	22.0 to 24.0V
2	Maximum SLC 24 VDC standby current (S+,S-)	1mA
3	Maximum SLC 24 VDC alarm current (S+,S-)	250 μ A
4	IDC input circuit wiring style	Class B (Style B)
5	End-of-line resistor for IDC	5.1k Ω ,1/2W
6	Maximum wiring resistance of IDC	100 Ω
7	Maximum wiring capacitance of IDC	1 μ F
8	Operating temperature range	32 to 120°F (0 to 49°C)
9	Operating humidity range	0 to 93% (non-condensing)
10	Maximum no. of module per loop	127 units
11	Dimensions	4.17"(106mm) (H) \times 4.17"(106mm) (W) \times 1.14"(29mm) (D)
12	Applicable electrical box for installation	2-1/2"(64mm)deep 2-gang box Standard 4"square box 1-1/2"(38mm)deep box

These instructions do not purport to cover all the details or variations in the equipment described, nor provide for every possible contingency to be met in connection with installation, operation and maintenance.

Specifications subject to change without prior notification

For Technical Assistance contact Potter Electric Signal Company at 800-325-3936

Actual performance is based on proper application of the product by a qualified professional.

Should further information be desired or should particular problems arise, which are not covered sufficiently for the purchaser's purpose, the matter should be referred to Nohmi or a distributor in your region.



Potter Electric Signal Company, LLC
 1609 Park 370 Place, Hazelwood, MO 63042 USA
 Telephone: (866)956-1211
 URL: <http://www.pottersignal.com>