

E-IDC1A Analog Class A Single Input Module Installation Sheet

Operation

The module is an analog addressable device used to connect a normally open, alarm, supervisory, or monitor type dry contact initiating device circuit (IDC) to a control panel. This module is designed for Class A circuit operation.

The device address is set using the two rotary switches located on the front of the module. One device address is required.

The device can be preset for alarm or supervisory operation using the slide switch located on the front of the module. The module can also be configured for other device types through front panel programming or the configuration utility.

Slide switch operation

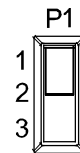
The following slide switch settings determine the operation of the module. Setting the initial slide switch position is generally performed during module installation. This setting can be changed while the system is operating, but the change must be confirmed through front panel programming.

Table 1: Slide switch settings

Setting	Operation	Device type description
1	Alarm	Alarm latching: Configures the module for normally open dry contact initiating devices. When the NO input contact of an initiating device is closed, an alarm signal is sent to the control panel and the alarm condition is latched at the module. (Factory default)
2	Not used	
3	Supervisory	Supervisory nonlatching US marketplace Supervisory latching Canadian marketplace Nonlatching: Configures the module for normally open dry contact initiating devices. When the NO input contact of an initiating device is closed, a supervisory signal is sent to the control panel and the supervisory condition is not latched at the module. Latching: Configures the module for normally open dry contact initiating devices. When the NO input contact of an initiating device is closed, a supervisory signal is sent to the control panel and the supervisory condition is latched at the module.

Note: Additional device types are available through front panel programming or the configuration utility. Refer to applicable control panel technical reference manual.

Figure 1 : Slide switch



LED operation

The module provides a bicolor LED that shows its status.

Normal: Green LED flashes

Alarm/active: Red LED flashes

Installation

WARNINGS

- This module will not operate without electrical power. As fires frequently cause power interruption, you should discuss further safeguards with your local fire protection specialist.
- This module does not support conventional smoke detectors.

Note: The module is shipped from the factory as an assembled unit; it contains no user-serviceable parts and should not be disassembled.

To install the module:

1. Verify that all field wiring is free of opens, shorts, and ground faults.
2. Make all wiring connections shown in "Wiring."
3. Set the module address as follows:

Use a screwdriver to adjust the two rotary switches on the front of the module. Set the TENS rotary switch (0 through 12) for the 10s and 100s digit and the ONES rotary switch for the 0 through 9 digit. For example: device address 21, set TENS rotary switch to 2 and set the ONES rotary switch to 1.

Refer to "Specifications" for available address numbers.

4. Set slide switch P1 to appropriate setting. Refer to "Operation."
5. Mount the module on the electrical box using screws provided with the electrical box.
6. Mount the wall plate on the module using #4-24 x 1/2 in. (13 mm) self-tapping screws.

Figure 2: Module address

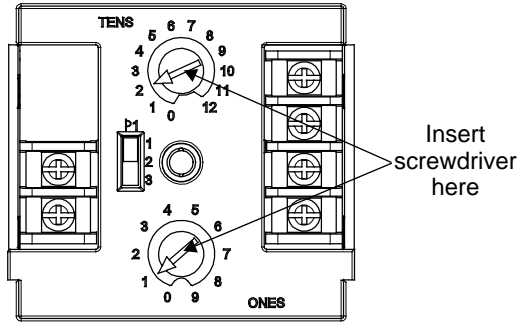
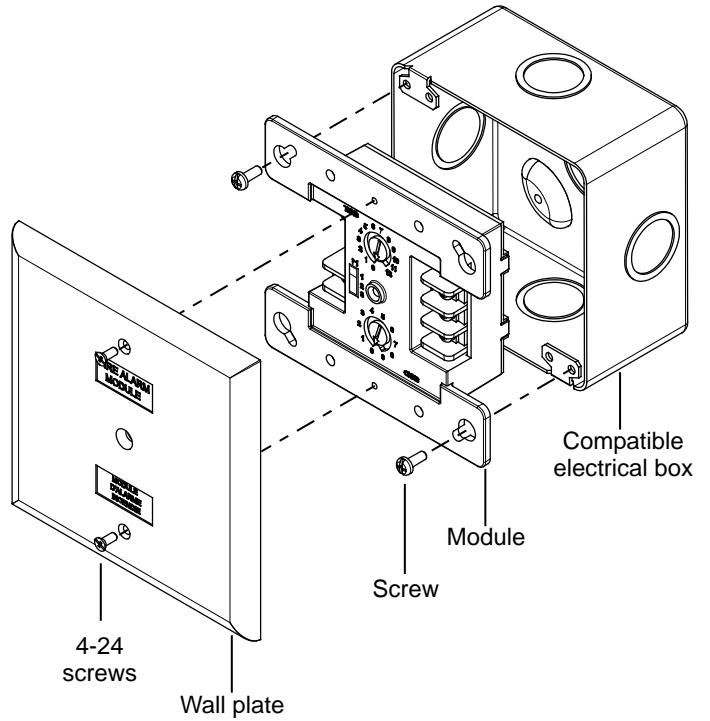


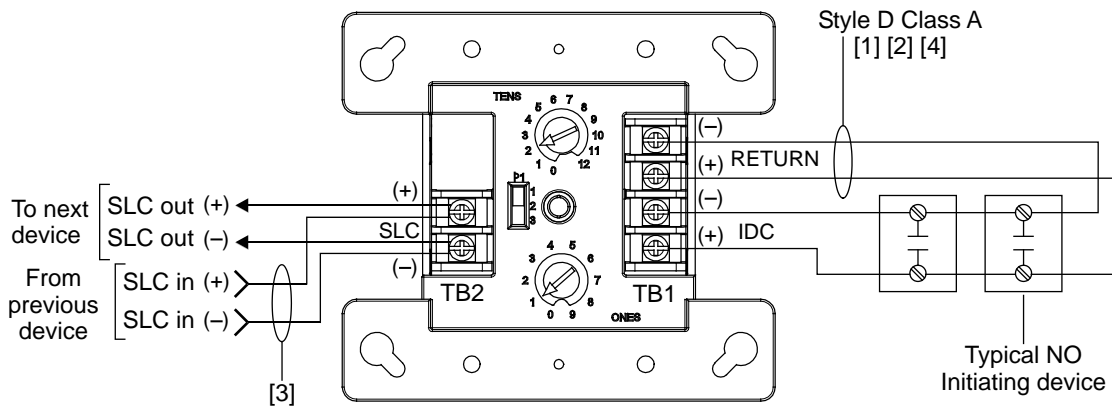
Figure 3: Module installation



Wiring

Wire in accordance with NFPA 72 and CAN/ULC-S524. Be sure to observe the polarity of the wires as shown in the diagram.

Figure 4: Module wiring



- [1] Maximum 25 Ω resistance per wire
- [2] Maximum 12 AWG (2.5 sq. mm) wire; minimum 18 AWG (0.75 mm²) wire
- [3] Refer to the control panel technical reference manual for wiring specifications
- [4] Maximum 10 VDC at 350 μ A
5. All wiring is power-limited and supervised
6. This module will not support two-wire smoke detectors

Specifications

Communication line voltage	Maximum 20.6 V peak-to-peak
Current	
Standby	400 μ A
Activated	500 μ A
Ground fault impedance	10 k Ω
Operating environment	
Temperature	32 to 120° F (0 to 49° C)
Humidity	0 to 93% RH, noncondensing at 90° F (32° C)
Storage temperature range	-4 to 140° F (-20 to 60° C)
Compatible electrical boxes	North American 4 inch square \times 2-1/2 in. (64 mm) deep 2 gang box Standard 4 in. square box 1-1/2 in. (38 mm) deep box
Wire size	12, 14, 16, or 18 AWG wire (2.5, 1.5, 1.0, or 0.75 mm ²) (Sizes 16 and 18 AWG are preferred)
Device address	01 to 64 (64 point control panel) 01 to 127 (127 point control panel)
Initiating device circuit (IDC)	
Max. circuit resistance	50 Ω (25 Ω per wire)
Max. circuit capacitance	0.1 μ F

