## Features

✧ Input port is provided with Class B pathway supervision when connects with 4.7KΩ EOLR (Part Number 3010786).

✧ Input port can be programmed to monitor either normally open or normally closed dry contact input.

✧ Input can also be programmed as "self-answering", which means that the Input port monitoring is disabled, and the module will directly send a "status" signal to FACP when the dry-contact output changes state.

✧ Addressable unit. Address can be programmed in field.

✧ Input port utilizes AD sampling technology for precise testing.

✧ Compatible with GST-M200 and GST-IFP4M Fire Alarm Control Panels (FACP).

✧ Guide rail for easy installation.

✧ Standard: UL864, NFPA [70, 72].

## Description

With a microprocessor, DI-M9301 Digital Single Input and Output Module can communicate with fire alarm control panel (FACP). On receiving start command from the FACP, it will close the output relay and illuminate the Active indicator.

## Connection and Cabling
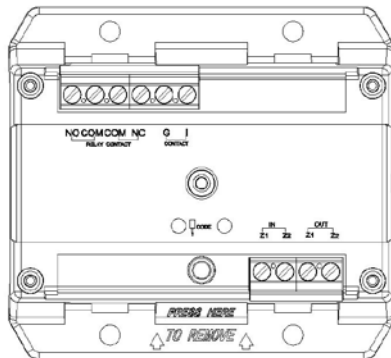
Terminals of the module are shown in Fig. 1.



Fig. 1

✧ (Z1, Z2) IN & OUT: Connecting with the Signaling Line Circuit (SLC) loop of FACP, polarity insensitive.

✧ I, G: Connecting with normally open dry contact of an input device that closes when the device is in alarm or changes state. It may also be set to normally closed input by hand held programmer.

✧ COM, NO, NC: Dry contact output terminals.

✧ CODE: Connecting with the programmer.

Recommended Wiring: minimum 17 AWG. Subject to local codes.




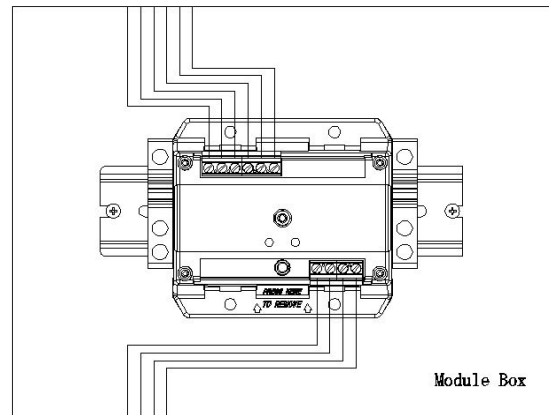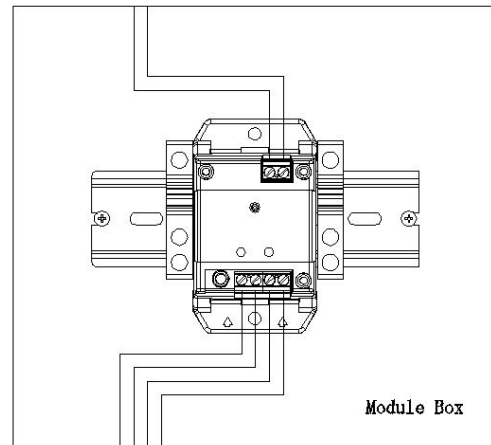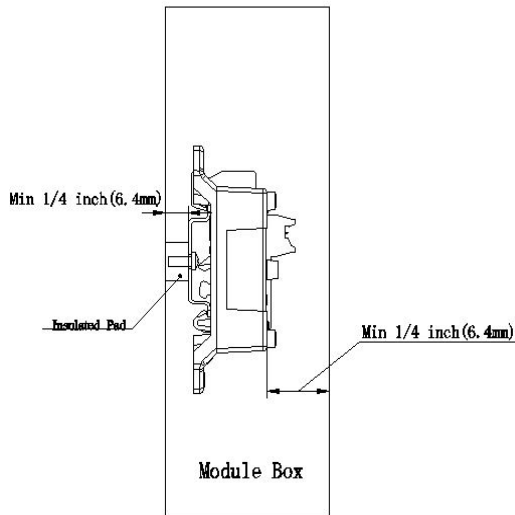
Fig 2

Fig. 3

3) The module can be mounted on a guide rail as shown on Fig 4.

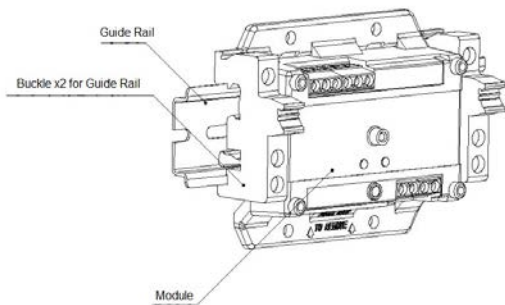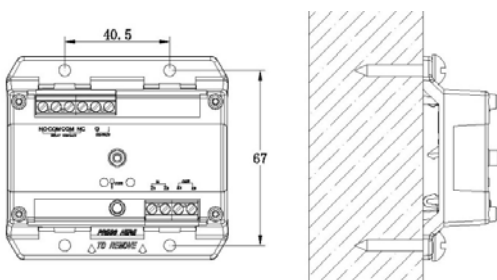4) The module can also be installed in the enclosure by 4 mounting screws as shown in Fig.5.



Fig. 4



Fig. 5

## Application

The module connects with fire control devices which are activated by the FACP.

The address and operating mode of the module can be programmed by a programmer in field. Please refer to *P-9910B Hand Held Programmer Installation and Operation Manual* for details.

**Programming Parameters：**

In standby state of the programmer, press *Fn* and then number 3, "—"will be popped up on the screen to indicate it is in programming mode. Write a parameter and then pressing "Program", a "P" will show on the screen meaning the parameter is programmed.

Press Fn and then number 3, input checking methods can be set.

| Parameters Setting | Input |
|---|---|
| 1 | Self-answering |
| 2 | normally-closed |
| Any other numbers(Default) | normally-open |

Pressing Fn and 4 can set the number of addresses.

| Parameters Setting | points |
|---|---|
| 2 | occupies two addresses, one for the input and one for output |
| Any other numbers(Default) | one address for both input and output |

Note: "Normally-closed" opinion can only be used for trouble circuit, or Class E non-fire, non-emergency input, e.g. door status sensor.

✧ Connection of the module to field devices with normally open dry contact is shown in Fig. 6(line detection is provided by the controlled device).

✧ Connection of the module to devices controlled by 24VDC is shown in Fig.7 (line detection is provided by the controlled equipment).
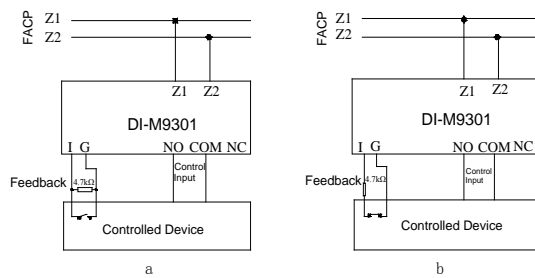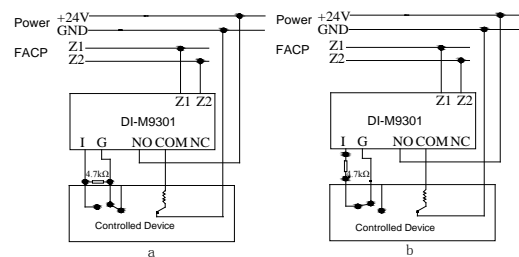


Fig. 6



Fig. 7

## Specification

| | |
|---|---|
| Operating Voltage | Loop 24VDC(16VDC - 28VDC) Power Limited |
| Standby Current | ≤ 0.28mA |
| Action Current | Loop ≤ 0.7mA |
| Output Capacity: | 2A @ 30 VDC, 0.35PF. |
| Output Control Way | Relay normally open/normally closed contact input |
| Programming | Electronically addressing |
| Initiating circuit maximum line impedance | 25Ω each wire |
| Address Range | Two options preset by manufacturer:<br><br>Option 1: Both Input and Output occupy one address that ranges from 1 to 242.<br><br>Option 2: Occupy two addresses representing Input and Output. Input address range is 1 to 241. Output address is automatically programmed as input address plus 1. |
| LED | Input LED: Red. It lights in receiving feedbacks, lights 0.5s on, 0.5s off in input faults, and flashes in other states.<br>Output LED: Red. It lights in relay action, turns off in other states. |
| Ingress Protection Rating | IP30 (not tested by UL) |
| Operating Temperature | 0℃ - +49℃ |
| Relative Humidity | ≤ 93%，Non Condensing |
| Materials of the Enclosure | ABS, white(RAL9016) |
| Dimension ((L×W×H) | 85.3mm×78mm×33mm （with base） |
| Weight | About 66.5g (with base) |

## Accessories and Tools

| Model | Name | Remark |
|---|---|---|
| P-9910B | Hand Held Programmer | Supplied separately |
| RY-1W-4.7k±5％ | End-of-Line Resistor | Provided |

## Limited Warranty

**GST** warrants that the product will be free from defects in design, materials and workmanship during the warranty period. This warranty shall not apply to any product that is found to have been improperly installed or used in any way not in accordance with the instructions supplied with the product. Anybody, including the agents, distributors or employees, is not in the position to amend the contents of this warranty. Please contact your local distributor for products not covered by this warranty.

This Data Sheet is subject to change without notice. Please contact GST for more information or questions.

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