

Features

- ✧ Providing Max. 16 channels of independent input. 1-16 selectable. Input signals are insulated from the loop.
- ✧ Providing two channels of independent dry contact output.
- ✧ 3-18 consecutive addresses, changing with selected channel quantity.
- ✧ Power supply monitored.
- ✧ Cable monitored for open circuit and short circuit.

Description

With microprocessor, DI-9309 Addressable Multi-Channel Interface can communicate with fire alarm control panel (FACP), monitor power supply, judge the logic state of input signal, control output and state indicators.

Each output channel occupies an individual address and receives start command from FACP, energizes the related relay, gives dry contact output and lights the related action indicator. Each input is corresponded to an address to receive the state signal from the equipment and transmit it to FACP. The quantity of channels can be set by jumpers.

Cabling

Z1, Z2: To the loop of FACP, polarity-insensitive.
 D1, D2: 24VDC power, polarity-insensitive.
 I(n)G: Channel n volt-free normally open input.
 NC1(NC2), COM1(COM2), NO1(NO2): Dry contact outputs of Channel I (Channel II).

Recommended Wiring

1.5mm² or above fire cable for Z1, Z2, D1, and D2.
 1.0mm² or above fire cable for others. Subject to local codes.

Installation

Fig. 1 shows dimensions and hole distances.

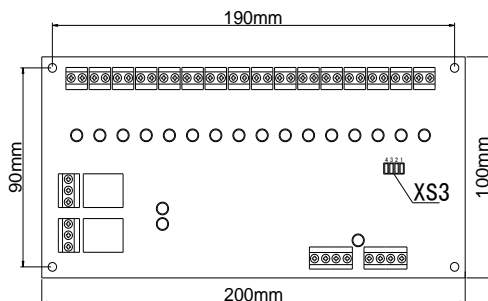


Fig. 1



Application

The DI-9309 interface is designed to connect with active equipment in field such as water flow switch, pressure switch, position switch, signal valve and equipment able to transmit back normally open signals. It can also connect with the equipment controlled by FACP such as fire door, pump, smoke exhaust fan, smoke vent, air vent, fire damper and etc.

1. Setting

DI-9309 interface can be addressed in field with power off by using P-9910B programmer connected to Z1 and Z2. Please refer to P-9910B Hand Held Programmer Installation and Operation Manual for details.
 Input Channel Setting: Set Channel 1-16 consecutive (always beginning from Channel 1) input through jumpers inserting to XS3, as shown in Table 1.

Table 1

INPUT CHANNEL SETTING				
Pin \ Channel QTY.	4	3	2	1
1	OFF	OFF	OFF	OFF
2	OFF	OFF	OFF	ON
3	OFF	OFF	ON	OFF
4	OFF	OFF	ON	ON
5	OFF	ON	OFF	OFF
6	OFF	ON	OFF	ON
7	OFF	ON	ON	OFF
8	OFF	ON	ON	ON
9	ON	OFF	OFF	OFF
10	ON	OFF	OFF	ON
11	ON	OFF	ON	OFF
12	ON	OFF	ON	ON
13	ON	ON	OFF	OFF
14	ON	ON	OFF	ON
15	ON	ON	ON	OFF
16	ON	ON	ON	ON

Code Range: Occupying 3-18 addresses, the output address of Channel 1 can be set within 1~225. The output address of Channel 2 is automatically increased 1 to Channel 1. The input address of Channel n is automatically increased n and 1 to Channel 1. For instance, the output address of Channel 1 is 15, and other addresses are shown in Table 2.

Table 2

Input and Output	Address
Channel 1 Output	15
Channel 2 Output	16
Channel 1 Input	17
Channel 2 Input	18
...	...
Channel n Input	15+n+1

2. Connection

- 1) Fig.2 shows the system connection with volt-free normally open input.

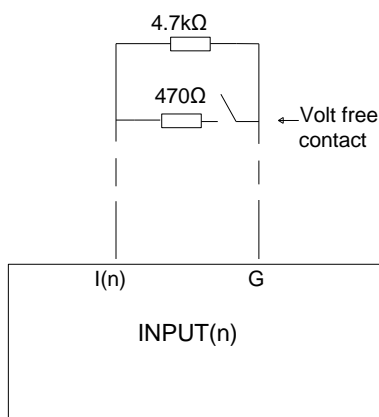


Fig. 2

- 2) Fig.3 shows the system connection with dry contact output.

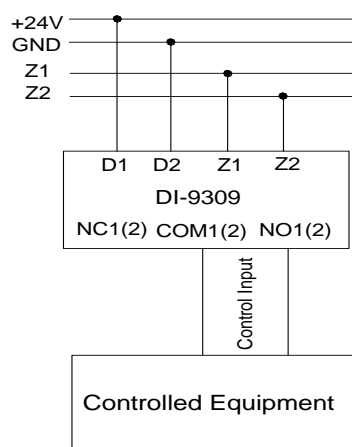


Fig. 3

Note: This interface cannot be used to control gas extinguishing equipment.

Specification

Operating Voltage	Loop voltage: 24V (16V~28V). Power Supply Voltage: 24VDC (20VDC~28VDC).
Standby Current	Loop $\leq 1.5\text{mA}$ Power $\leq 50\text{mA}$
Action Current	Loop $\leq 3\text{mA}$ Power $\leq 100\text{mA}$
Output Capacity	Output contact capacity: 220V/2A.
Output Type	Dry contact output.
Programming Method	Electronically programming.
Code Range	Occupying 3-18 addresses, the output address of Channel 1 can be set within 1~225. The output address of Channel 2 is automatically increased 1 to Channel 1. The input address of Channel n is automatically increased n and 1 to Channel 1.
Action Indicators	Red. Separate polling indicator HL0. Individual state LED(n) for each channel input. Flashes in fault state. Illuminates in action state. Quiet in normal supervisory. HL1 and HL2 for each channel output. Illuminates when activated.
Ambient Temperature	-10°C~+50°C
Relative Humidity	$\leq 95\%$, non condensing
Mounting Hole Distance	190mm×90mm
Dimensions (L×W×H)	200mm×100mm×20mm
Weight	About 240g

Accessories and Tools

Model	Name	Remark
P-9910B	Hand Held Programmer	Order separately

Limited Warranty

GST warrants that the product will be free of charge for repairing or replacing from defects in design, materials and workmanship during the warranty period. This warranty does not cover 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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