

# I-9101 Intelligent Combination Heat/Photoelectric Smoke Detector

## **Features**

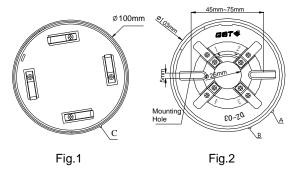
- ♦ Electronically addressed.
- ♦ Built-in microprocessor stores 14 history data.
- Drift compensation to suit environment changing extensively.
- Combined smoke and heat algorithm greatly improves detector performance.
- ♦ Self-diagnostic.
- Removable innovative sensing chamber, easy for maintenance.
- ♦ Reporting dirt fault for contaminated chamber.
- ♦ Remote indicator output available.
- Designed to comply with EN 54-5/EN 54-7 standards.

# **Description**

I-9101 Intelligent Combination Heat/Photoelectric Smoke Detector integrates photoelectric detection and fixed temperature and rate of rise detection technology by combining smoke sensor and heat sensor in mechanism and circuitry structure. Just because of the combination of smoke detection and heat detection, I-9101 detector not only overcomes the disadvantage that detectors using common infrared scattering technology are insensitive to black smoke with small particles, but also can pick up fire with obvious rise of temperature such as alcohol flame, thus extending its application range.

## **Connection and Cabling**

Fig. 1 shows the detector bottom and Fig. 2 the base.



There are four terminals with numbers on the base.

- 1&3: Loop connection (non-polarized)
- 2: Positive terminal of remote indicator
- 4: Negative terminal of remote indicator



## **Recommended Cabling**

1.0 mm<sup>2</sup> or above fire cable for detector loop, laid out through metal conduit or flame-retardant conduit. Subject to local codes.

#### Installation

A fixed installation direction is ensured by the location elements on the detector and the base. Fix the base with two tapping screws, and then align mark C on the detector with A on the base, rotate the detector to align mark C with mark B (Refer to Fig. 1 and 2 for the position of the marks), the detector will be fitted to the base.

Mounting of the detector is shown in Fig. 3.

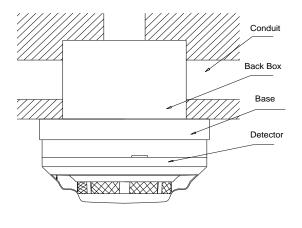


Fig.3

# **Application**

The detector can be electronically addressed by a programmer. Please refer to *P-9910B Hand Held Programmer Installation and Operation Manual* for details.

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# **Specification**

Operating	loop 24V (16V~28V)	
Voltage	,	
Standby	≤0.8mA	
Current		
Alarm Current	≤5. 0 <b>mA</b>	
Indicator	Red. Flashes in normal, and	
	illuminates in alarm	
	Directly connecting with indicator	
Remote	(built-in 5.1kΩ resistor, maximum	
Indicator	output current is 5.0mA). Quiet in	
Output	normal condition. Illuminates	
	steadily in alarm.	
Alarm	58℃	
Temperature		
Class	A2R	
Rate of	<b>3</b> ℃/min	
Response	3 C/IIIII	
Programming	Electronically programming	
Method		
Code Range	one address within 1 $\sim$ 242.	
Wiring	Non-polarized 2-core for loop.	
	Polarized 2-core for remote	
	indicator.	
Ingress	IP22	
Protection		
Rating	10.00	
Environment	-10℃~+50℃	
Temperature	<0.50/	
Relative	≤95%, non condensing	
Humidity	400	
Material of	ABS	
Enclosure	Diamentary 100mm	
Dimensions	Diameter: 100mm	
Manuatir - 11-1	Height: 56mm(base)	
Mounting Hole	45mm∼75mm	
Distance	About 120g	
Weight	About 120g	

#### **Maintenance**

- The detector should be installed just before commission and kept well before installation. Corresponding measures should be taken for dust-proof, damp-proof and corrosion-proof.
- Dust covers are an effective way to limit the entry of dust into smoke detector sensing chambers. Therefore, the dust cover should not be removed until the building starts to be used.
- Clean the detector at least once 1 year to ensure normal operation of the system.
- If unwanted alarms are often found of the detector on site, the sensing chamber should be cleaned. Power must be removed from the detector before cleaning.
- Before cleaning the detector, notify the proper authorities that the system is undergoing maintenance and will be temporarily out of service. Disable the zone or system undergoing maintenance to avoid any unwanted alarms.
- The detector should be tested again after cleaning and re-installing. Notify the proper authorities when the system is back in service.
- Fire simulation test should be done to the detector at least once 6 months.

## **Accessories and Tools**

Model	Name	Remark
P-9910B	Hand held programmer	Order separately
DZ-03	Base	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 doesn't 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 document is subject to change without notice. Please contact GST for more information or questions.

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