





# **Innovation** Conventional **Optical Smoke Detector**

DC-9102

# **Description**

The DC-9102 Innovative Conventional Optical Smoke Detector is the ideal device for most application due to its excellent digital response to a wide variety of different type of smoke patterns. The unit meets the sensitivity requirement of EN 54 part 7, European Standard Unique and pleasing with a low profile design, unobtrusive to complement modern building designs.

The unit incorporates an intelligent processor that provides digital signaling. The integral microprocessor analyses the signal according to integrated algorithm of analyzing fire, then confirms these pattern with the pre-programmed fire scenarios and smoke patterns for a faster and safer response.

## **Technical Specifications**

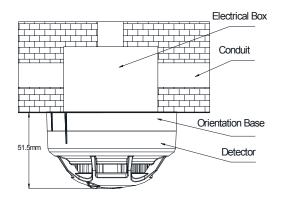
- Operating Voltage: 12VDC~28VDC
- Standby Current: ≤60µA
- Alarm Current: 10mA≤l≤30mA
- Fire LED:Red, Flash periodically (2s~4s per once ) in normal state, and illuminate in alarming.
- Remote indication output:Directly connecting with remote indicator (built in 1k resistor in series, output voltage is 5V); don't illuminate when in polling; illuminate in alarming.
- MAX. ripple voltage: 2V(peak to peak value)
- Alarm Reset: Instant power down (2s Min, 1.0VDC Max)
- Power-up Time: ≤10s
- Wiring: Two wire, polarity-sensitive
- Ingress Protection Rating: IP23
- Environment Temperature:-10°C~+55°C
- Relative Humidity: ≤95%, non condensing
- Material and Color of Enclosure: ABS, white (RAL 9016)
- Dimension: Diameter: 100mm
  - Height: 45mm (without base)
- Mounting Hole Spacing: 45mm~75mm
- Weight: about 110g

## **Features and Benefits**

- Built in microprocessor
- Built in magnetic test switch
- Algorithm maps for faster response and false alarm
- With drift compensation to ensure constant sensitivity
- Sensing chamber for exceptional dust proof ability and LED
- Built in remote indicator output
- Unique Low profile design
- EN54 compliance

#### **Detector Installation**

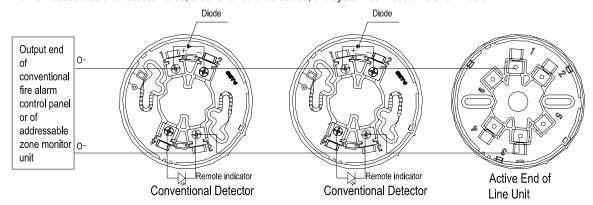
The detector should be installed in compliance with all local codes having a jurisdiction in your area or BS 5389 Part 1 and EN54. Before installation verify the proper wiring and base are firmly mounted to prevent detector damage before the installation. Point the detector in the base by the mark-line and secure the detector in that position by rotating it clockwise until it reaches the next mark line. Do not remove red plastic dust cover until the final handover is done.



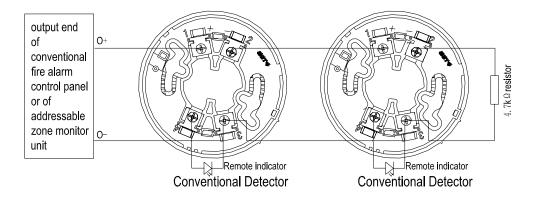
# **Wiring and Connection**

1. When the detector is connected with conventional fire alarm control panel or I-9319 addressable zone monitor unit in series, if a P-9907 AEOL is connected to the end of output loop, a 1N5819 Diode should be connected to the detector base.

When the AEOL is not used as the detector base, a cover should be added, the system connection is shown below:



2. When the detector is connected with conventional fire alarm control panel (those within the dotted line are equivalent to a conventional fire alarm control panel) or I-9319 Addressable zone monitor unit in series, if an end of line resistor is connected to the end of output loop, then no diode is connected to the detector base. The system connection is shown below:



Maximum 15 detectors can be connected in one zone. Cooperating with end of line device, the compatible panel can monitor the cable for open circuit and short circuit. Panel will report if any detector is removed. With the AEOL, the functioning of other device will not be affected by the detector removal.

## **Selection of compatible Control Panels**

Compatible with all GST Conventional panel and GST Intelligent Fire Alarm Panels using Zone monitor module:

# **Ordering Information**



Part Number: DC-9102

**Description:** Innovation Conventional Optical

Smoke Detector
Weight / Kg.: 0.123
Pack Qty. per Box: 100

## **Accessories**



Part Number: DB-01

Description: Detector Base - EOLR

Weight / Kg.: 0.05 Pack Qty. per Box: 300



Part Number: DB-01D

**Description:** Base with Diode AOL (P-9907)

Weight / Kg.: 0.05 Pack Qty. per Box: 300

