



## Digital Intelligent Dual Heat Detector

DI-9103

### Description

This detector is extremely reliable for application in places where may have high dust levels or smokey environments, making a normal smoke detector unsuitable, for example boiler/plant room, cars parks, kitchen, loading bays, furnace/kiln rooms.

Meets the sensitivity requirement of EN 54 part 5 European Standard

Unique pleasing with a low profile design, unobtrusive to complement modern building designs. The unit incorporates an intelligent processor that provides Algorithm map, Digital signaling, Drift compensation, Self Diagnosis and history log.

Secure and speedy communication through the on board processor enables the detector to make its own decision and sending data to the panel within a second, resulting in greater automation. The sensor and the panels utilized fuzzy logic providing an almost limitless cause and effect scenarios.

Electronic addressing and sensitivity adjustments can be done through Handhold Programming device (P-9910B), purchased separately, and can be modified in the panel.

### Features and Benefits

Dual fixed temperature heat detector. Combining both fixed temperature and rate of rise heat detection in a single sensor.

As standard the fixed temperature is set to 58°C while the rate of rise is set to 3°C in one minute.

The rate of rise function can be switched off and the fixed temperature can be adjusted between 54 and 72 degrees C

1. Built in 8 bit microprocessor
2. Algorithm maps for false alarm rejection
3. Digital sensing
4. Secure and speedy communication
5. Drift compensation
6. Self diagnosis and history log
7. Electronic addressing
8. Duplicated address report
9. LED for 360° vision
10. Built in remote indicator output
11. Unique low profile design
12. Fixed temperature response is adjustable via hand held programming tools.
13. EN54 compliance

### Selection of compatible Control Panels

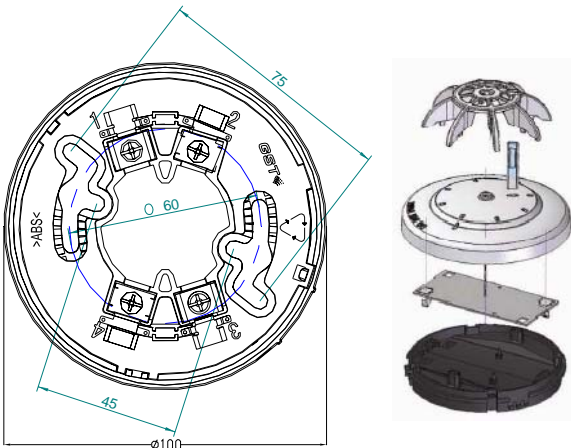
Compatible with all GST Intelligent Fire Alarm Panels GST 100, GST 200/2, GST 5000, GST 9000 and IFP8

## Technical Specifications

- Standard: EN54-part5
- Approval: Pending
- Protection rating: IP 32
- Operating voltage: 24Vdc Loop voltage
- Operating Current: Standby current 0.8mA  
Alarm Current 5mA
- Operating temperature: -10°C to +50°C
- Relative humidity: 95%
- Application: Indoor use
- Remote output: Directly connect to remote indicator (built in 5.1k resistor in series, output voltage is 4.3V); not lit in polling, constantly illuminated in alarming.
- Alarm Temperature levels: L1=58°C, L2=66°C, L1=72°C
- Rate of Rise Temperature: 3°/min
- Address setting: Via P-9910B, within 1 to 241, engage one address
- Recommended coverage area: 30 m<sup>2</sup>
- Visual Indicator: LED, Red  
(lit steady when alarm, flash in polling)
- Material and colour: ABS, traffic-white
- Wiring: 1 pair non polarized
- Dimensions: diameter 10cm; height 4.45cm

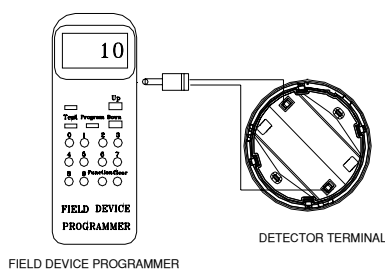
## Detector Installation

The detector is mounted using our standard base DB-01. Multiple-direction design allows easy direction adjustment. Suitable for surface mount only, mount on standard 1gang electrical back box with a mounting hole of 65mm spacing.



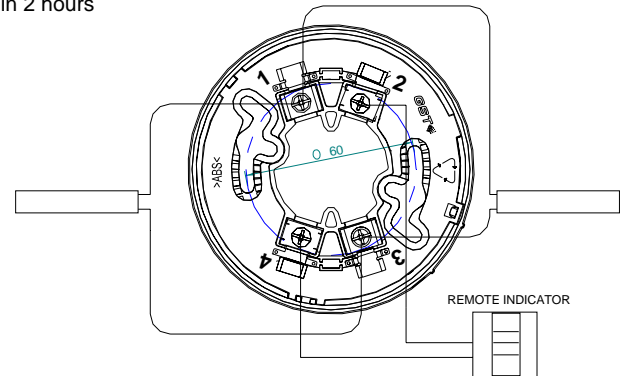
## Programming

The address of the detector can be programmed using GST handheld programmer (P-9910B), purchased separately. Connect the two wires of the handheld programmer to any two opposite terminals of the detector.



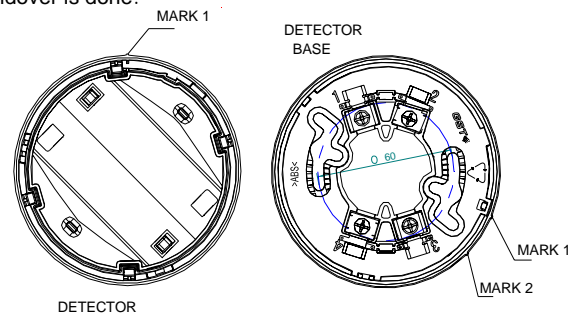
## Wiring and Connection

Connect the wires to the required terminal according to the wiring diagram below; terminal 1(+) and terminal 3(-) for the loop; connection of remote indicator output is on terminals 2(+) and 4(-). The cable must be fire rated type and the size depends on the distance and application. Recommended cable size 1.5mm<sup>2</sup> fire rated min 2 hours



## Detector Installation

The Intelligent dual heat 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.



## Ordering Information



**Part Number:** DI-9103  
**Description:** Digital Dual Heat Detector  
**Weight / Kg.:** 0.110  
**Pack Qty. per Box:** 100

## Accessories



**Part Number:** DB-01  
**Description:** Detector base  
**Weight / Kg.:** 0.049  
**Pack Qty. per Box:** 300

