Intelligent Reflective
Beam Detector

I-9105R

LPCB CE

548d(cl-5)   0832-CPD-0521

Description

The I-9105R Intelligent Reflective Beam Detector with adjustable sensitivity and an operational range of between 8 and 100 metres, the device works on the principle of reflective infrared beam obscuration. Used in conjunction with a reflector(s), it will notify the fire alarm panel when the infrared beam is obscured by smoke.

Secure and quick communication through the onboard processor enables the detector to make its own decision, resulting in greater automation. The sensor and the panels utilize 'fuzzy logic'- providing almost limitless cause and effect scenarios.

This device is ideal for use in areas where ceiling height exceeds 6 metres, Ideal applications include historical buildings, warehouses, large storages, shopping malls, leisure centres, exhibition halls, hotel lobbies, printing houses, clothing factories, museums and prisons, as well as places where slight smoke particles or corrosive gas exist.
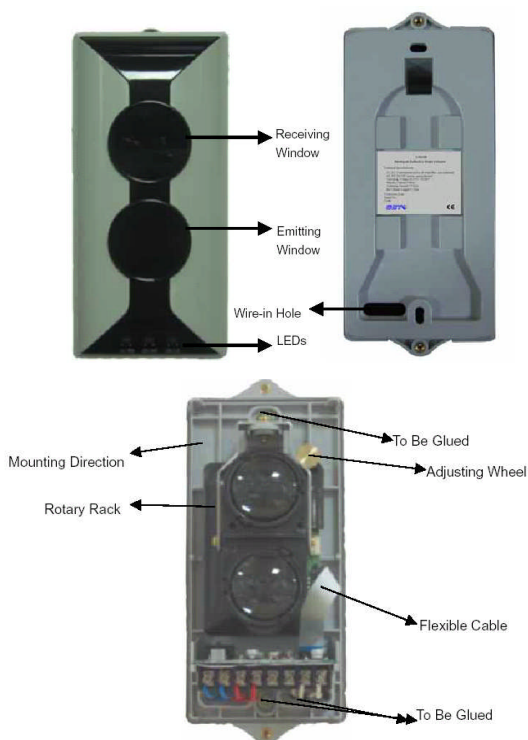
Features and Benefits

- Wide monitoring area, range 8-100 meters
- Combination of the emitting and receiving parts makes mounting easy and accurate optical pathway
- Simple and cost effective to install transmitter and reflective via 'honey comb' mirror
- Quick and easy to set up, visual strength indication.
- Built-in microprocessor
- Conventional System compatible
- Self-diagnosis function can monitor for internal faults
- Automatic compensation for factors weakening received signals, such as dust contamination, positional movement and ageing of the transmitter
- Electronically addressed
- Two selectable levels of sensitivity adjustment.
- SMT processing technology
- Attractive and pleasing appearance

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D A T A   S H E E T
Note: Specifications are subject to change without notice.

Technical Specifications

- Standards: BS EN54 Part-12
- Approvals: LPCB, CE-CPD
- Operating Voltage :PSU Voltage: 24Vdc (±10%)
                          Loop Voltage: 24Vdc
- Operating Current
  PSU
     Commissioning: 20mA
     Standby current: 8mA
     Alarm current: 12mA

- Length of Optical Pathway: 8-100meter
- Monitoring width: 14meters
- Monitoring Area: 1400m²
- Max Height: 40 meters
- Adjusting Angle: -6° to +6°
- Field Programmable Sensitivity:
  Level 1:1.61dB; Level 2: 2.31dB
- Protection Rating: IP20
- Operating Temperature: -10°C to +50°C
- Relative humidity: 95%
- Application: Indoor use
- Material and Colour: ABS, Gray
- Wiring: 1 pair -24Vdc, 1pair- loop
- Dimensions:206mmX95mmX95mm
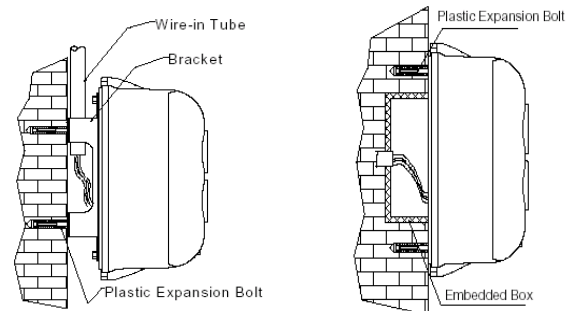
Indication of Detector Status

- **Commission:** Green LED and Yellow LED are lit or flash in a sequence.
- **Normal monitoring state:** Red LED flashes periodically (with loop connected)
- **Fire:** Red LED constantly illuminates, and Yellow LED turns off. The fire signal has to be reset by the controller
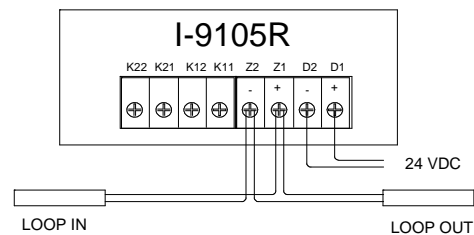- **Fault:** Yellow LED constantly illuminates

Mounting the Detector

The Intelligent beam detector should be installed in compliance with all local codes having a jurisdiction in your area or BS 5389-1 and EN54. The detector can be mounted in 2 ways: installed onto a standard two gang electrical box, or directly by drilling the holes and fixing with plugs.
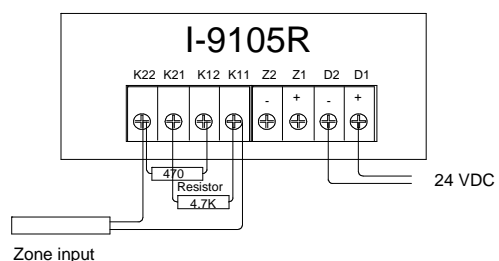
Connect the wires to the required terminal according to the wiring diagram. The D1, D2 is for 24VDC power supply. The Z1, Z2 for loop. For conventional system K11,K12 for Fire output-normally open and K21,K22 for Fault output-normally close. The cable must be fire rated and the size depends on the distance and application. The minimum size gauge 1.0mm²
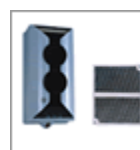

For addressable Connection

For conventional Connection

Selection of Compatible Control Panels

Compatible with all GST Intelligent Fire Alarm Panels GST200-2, GST5000, GST IFP8

Ordering Information

Part Number: I-9105R
Description: Intelligent Reflector Beam Detector
Weight / Kg.: 1.3
Pack Qty. per Box: 10

MANUFACTURED IN ACCORDANCE WITH

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