UTC Fire & Security
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Intelligent Reflective **Beam Detector**

I-9105R

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

Description

I-9105R Intelligent Reflective Beam Detector works on the principle of reflective infrared beam smoke detector that can be directly connected to a fire alarm loop. Transmitting status information via the loop between the detector and controller. The detector must be used together with a reflector. The number of reflector(s) to be used (one or four) depends on the distance from the detector.

Built-in intelligent microprocessor, the detector has strong ability of analysis and judgment. The detector automatically carries out system adjustment, compensation and variation of ambient data.

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

The detector is ideally suited to 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

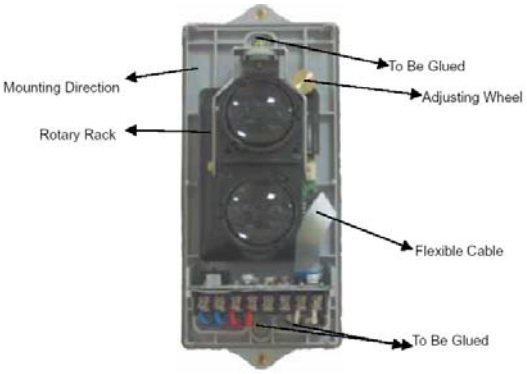
- Wide monitoring area, range 8-100 metres
- Combination of the emitting and receiving parts makes mounting easy and accurate optical pathway
- Simple and cost effective to install transmitter and reflective via ‘honey comb’ mirror.
- Quick and easy to set up, visual strength indication.
- Built-in microprocessor
- 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

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
  Loop
  Standby current: 2mA
  Alarm current: 3mA
- 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

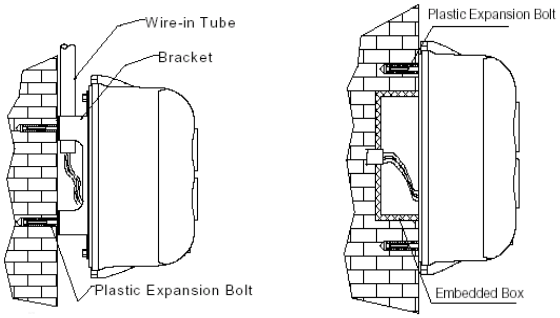
- **Commission:** Green LED and Yellow LED are lit or flash in a sequence.
- **Normal monitoring state:** Red LED flashes periodically (with loop connected)
- **Fire:** Red LED constantly illuminates, and Yellow LED turns off. The fire signal has to be reset by the controller
- **Fault:** Yellow LED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



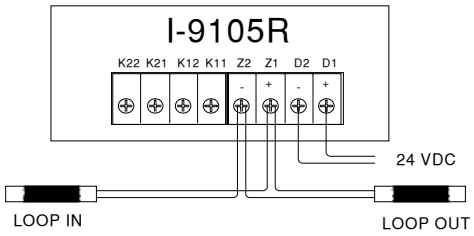
Mounting the Detector

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: the installed onto standard two gang electrical box, or directly by drilling the holes and fixing with plugs.

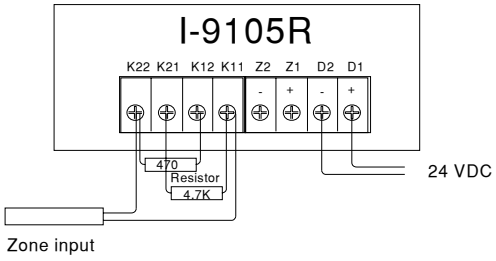
Connect the wires to the required terminal according to the wiring diagram. The D1, D2 is for 24VDC power supply. The Z1, Z2 for loop. For conventional system K11,K12 for Fire output-normally open and K21,K22 for Fault output-normally close. The cable must be fire rated and the size depends on the distance and application. The minimum size gauge 1.0mm²



For addressable Connection



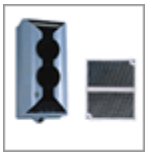
For conventional Connection



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

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