

Features

- ✧ The built-in microprocessor can conduct the signals and communicate with fire alarm control panel (FACP).
- ✧ With algorithm, report alarm quickly and reduce false alarm rate.
- ✧ Three sensitivity levels.
- ✧ High sensitivity, reliable performance, dust-proof, damp-proof and corrosion-proof.

Description

I-9104 Intelligent Ultraviolet Flame Detector detects fire by analyzing ultraviolet radiation of material flaming. It's applicable to places where open fire, fire with intense flame radiation and fire without smoldering stage take place easily, as well as places where quick response to a fire is required. Used together with other detectors, it can sense fire in time to minimize losses as much as possible.

Connection & Cabling

Fig. 1 shows the structure of the detector and Fig. 2 the base (unit: mm).

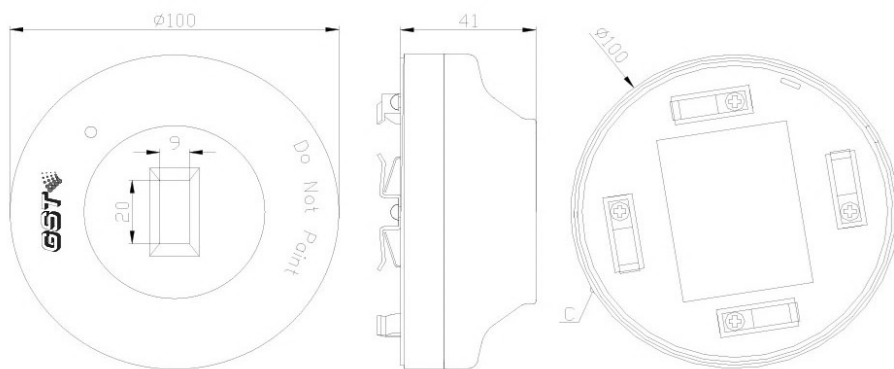


Fig. 1

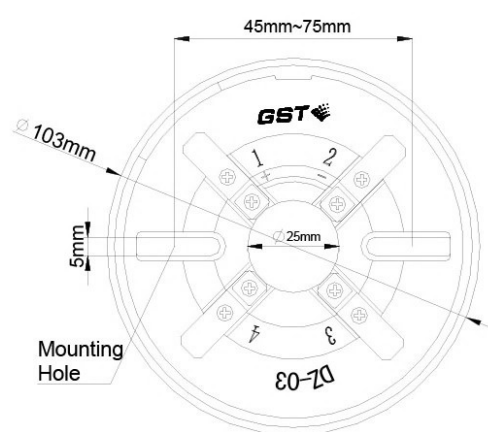


Fig. 2

- ✧ Thread the cable through the conduit of back box and base; fix the base on the back box.
- ✧ There are four terminals with numbers. Connect the loop of FACP to any two diagonal terminals (non-polarized), the other two are used to fix the detector accessorialy.
- ✧ When installing, align the bottom of the detector to the base, rotate the detector clockwise, then the detector will be fitted to the base.



Recommended Cabling

1.0mm² or above copper-core cable.

Installation

Warning: Before installation, please disconnect power from the loop and verify that all the bases are securely installed and wiring is correct at each base.

Power up after all the detectors are installed.

Check the enclosure and labels before installation, ensuring there is not nicks and distortion.

Fig. 3 shows the mounting of the detector.

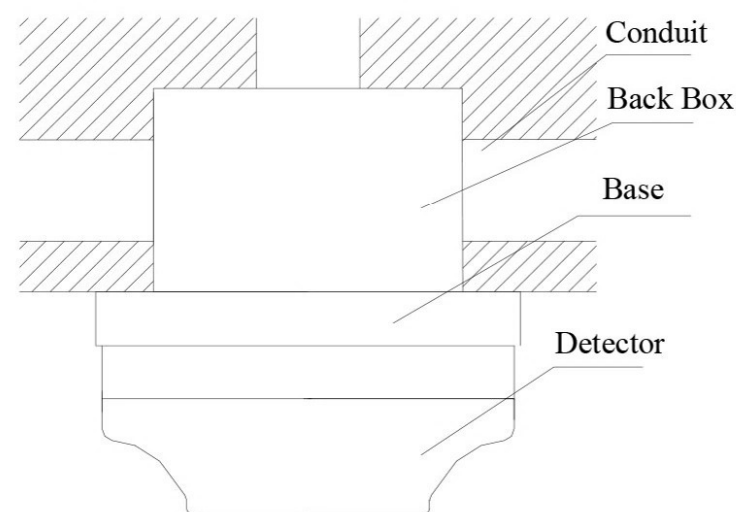


Fig. 3

Operation

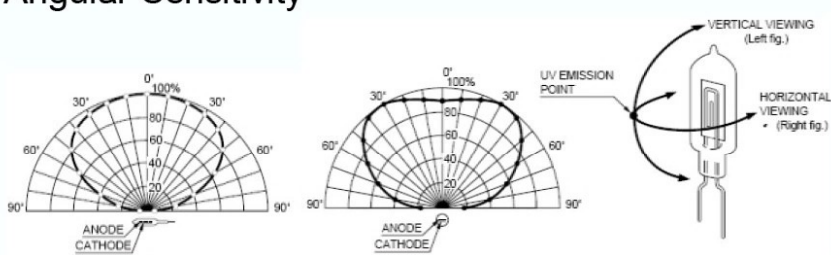
The detector is directly connected to GST FACP. The FACP polls the detector and displays fault and fire information. There are three sensitivity levels for the detector. The sensitivity level one is set by default.

The detector can be programmed by a programmer on site. The programmer can read and change the address and sensitivity level. Refer to *P-9910B Hand Held Programmer Installation and Operation Manual* for further details.

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. Clean the detector and do fire alarm tests regularly. Repair the fault in time.

Specification

Operating Voltage	Loop: 24V(12V~28V)
Standby Current	≤2mA
Action Current	≤2.5mA
Alarm Clear	Instantaneous power out (5s MAS, 2.5VDC MAX)
Power-up Time	≤5s
Indicator	Red. Flashes in polling. Illuminates steadily in alarm.
Wiring	Two wire for loop
Programming Method	Electronically addressed.
Code Range	One address within 1~242
Spectral Response Range	185nm~260nm
Angular Sensitivity	 <p>The diagram shows two hemispherical plots for angular sensitivity. The left plot is labeled 'VERTICAL VIEWING (Left fig.)' and the right plot is 'HORIZONTAL VIEWING (Right fig.)'. Both plots show a 100% sensitivity at 0 degrees, decreasing to 0% at 90 degrees. The plots are divided into 30-degree segments. A 'UV EMISSION POINT' is indicated at the center of the plots. The detector is shown in a side view with 'ANODE' and 'CATHODE' labels.</p>
Detection Distance	Level I: 25m Level II: 17m Level III: 12m
Operating Temperature	-20°C~+55°C
Relative Humidity	≤95%, non condensing
Dimension	Diameter: 103mm Height: 53.5mm (with base) Diameter: 100mm Height: 41mm (without base)
Ingress Protection Rating	IP21
Material and Color of Enclosure	ABS, white (RAL 9016)
Weight	About 110g
Mounting Hole Distance	45mm~75mm

Fire for Testing: 2000g industry ethanol burning in a container (dimension: 33cm×33cm×5cm).

Cautions

The detector should be handled with care wherever it is moved, avoiding collision, squeezing, and friction.

The detector is not suitable for the following places.

- ✧ Where flameless fires are expected.
- ✧ Where thick smoke spreads before flames.
- ✧ Places where the "view" of the detector is easy to be obscured.
- ✧ Where the sun can directly or indirectly shine the detector.
- ✧ Where there are strong ultraviolet light source, such as halogen and tungsten.
- ✧ Where there is open flame, welding operation, X rays and arc and spark etc.

Accessories and Tools

Model	Name	Remark
DZ-03	Common Detector Base	Order separately
P-9910B	Hand Held Programmer	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 shall not apply to 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 Data Sheet is subject to change without notice. Please contact GST for more information or questions.