

**GAP SERIES GAS ALARM PANELS**

**Instruction Manual**



Read this manual thoroughly and carefully before using this product.

Retain this manual for future reference

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## Definition

The following words in the front part have special meanings in the manual.



Warning: it may cause casualty of oneself or others.



Caution: it may cause loss of the company or other properties.

Note: significant points require special attention, which make operation more efficient and convenient.

## I. Safety precautions

- 1) Do not install the equipment in or make it close to any actual or predictable hazardous environment with combustible and explosive gas.
- 2) Do keep all parts and surfaces free from oil, grease and dust.
- 3) Make sure connect input signal to the alarm before inputting power.
- 4) The equipment is allowed to be adjusted or repaired by qualified engineer or technician who has received training of the company.
- 5) Please stop the equipment immediately and inform technical service of our company for troubleshooting in case of power fault.
- 6) Carefully read and fully understand information in the manual before operating the equipment. The information is applicable for gas alarm system and any integrated optional equipment and accessory.

## **II. Anticipated purpose**

GENTEC® GAP series gas alarm panel is to alarm and monitor interrupted gas supply of two-way gas manifold system. Audible and visual alarm is automatically triggered when gas source pressure is lower than the set pressure; LED green indicator shows normal gas source pressure when it is higher than the set value.

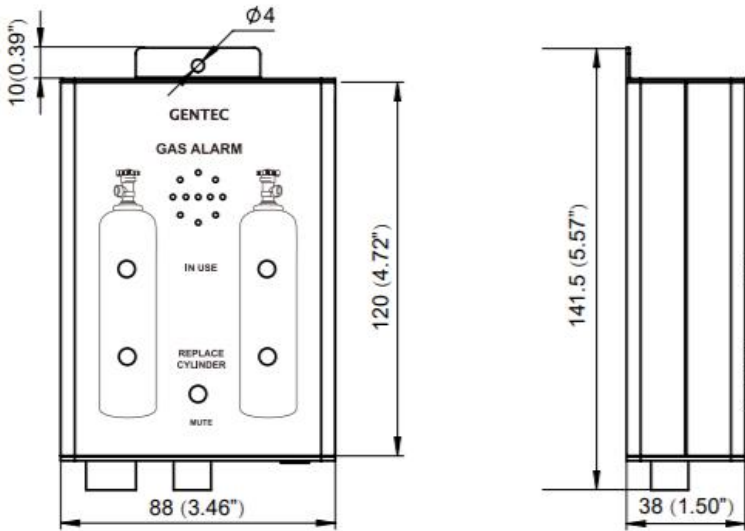
## **III. Characteristics**

- 1) Two-way dry contact input signal (pressure gauge with electric contact or pressure switch)
- 2) Split aluminum housing
- 3) External DC 24V power adapter for power supply, safe and reliable
- 4) Audible and visual alarm indication, adjustable alarm sound (adjustment in housing)
- 5) Mute audible alarm by silencing button
- 6) When one way of alarm signal is issued and muted, activation of the other way of alarm signal is not interfered
- 7) PCB plug-in wiring terminal is adopted to facilitate connecting input and output signal wires
- 8) Remote output alarm signal, expandable external audible and visual alarm lamp

#### **IV. Technical parameters**

- 1) Input power of power adapter: AC100-240V 50/60Hz
- 2) Work voltage of alarm: DC24V (2A)
- 3) Input signal: normally-closed contact of pressure switch or pressure gauge with electric contact
- 4) Alarm: audible and visual alarm
- 5) Optional alarm output:
  - a. External signal lamp
  - b. Output voltage signal (DC24V 1.5A)
  - c. Passive ON-OFF output
- 6) Storing environment temperature: -20-60°C (-4-140°F)
- 7) Operating environment temperature: 5-40°C (41-104°F)
- 9) Atmospheric pressure: 86-106kPa

## V. Installation and operation

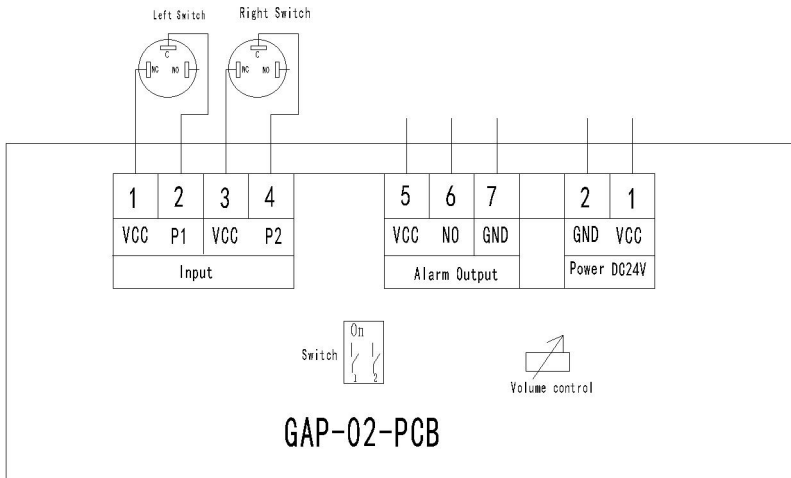


Note: size unit is mm (in.)

- 1) Installation size diagram
- 2) Schematic diagram of installation



## VI. Wiring diagram



- a. VCC of alarm output port connects with NO port, when dial switch 1 and 2 on GAP-02-PCB are at Off. Under the circumstance, VCC and NO are passive ON-OFF signal in case of alarm output.
- b. VCC of alarm output port connects with NO port, when dial switch 1 and 2 on GAP-02-PCB are at On; VCC is DC24V and GND is OV. Under the circumstance, output port NO and GND are DC24V voltage output signal in case of triggered alarm.
- c. Alarm volume can be controlled by adjusting the potentiometer on GAP-02-PCB.

## VII. Product maintenance, storing and transport

### 7.1 Maintenance

Although main components of the equipment have very long service life in general environment, uncertainty of environmental conditions may cause product degradation. Therefore, regular inspection is needed to ensure safe and stable operation of the product. At least one inspection is suggested every six months to one year; however, more frequent inspection is necessary in adverse environment. Measures shall be taken immediately to correct any circumstance in the table below.

No.	Item	Inspection	Condition	Troubleshooting
1	Power	Check for DC power change exceeding specification or looseness.	Work voltage is DC24V	Check power adapter brand and panel indication
2	Installation and wiring	Check wiring joint for correct and fixed installation	No looseness.	Install loose wiring joint correctly and reliably.
		Check all mechanisms and wiring screws.	No looseness.	Fix loose screws by a screwdriver.
		Check for wiring damage.	No damage.	Replace wiring.
3	Alarm indication and sound	Check alarm sound and display of	Trigger audible and visual alarm	When left or right gas source pressure drops to



	test	work indicator	when gas source pressure is lower than set pressure	set value of pressure switch or pressure gauge with electric contact, corresponding red indicator is ON and alarm sound is activated; otherwise, send it back for repairing.
4	Silencing test	Alarm sound shall be silenced when silencing button is pressed	Press silencing button for silencing when alarm sound is activated.	Send it back for repairing

## 7.2 Cleaning:

### Panel cleaning:

Remove dust on the panel by a flexible dust collector, slightly moisturized non-abrasive toilet paper or rag. Mild detergent can be used but strong acid or alkaline reagent shall be avoided.

### 7.3 Storing conditions

If a product is not installed in time after its purchasing, it can be placed in a clean, sterilized and nontoxic plastic bag (sealing the bag tightly) and stored in a clean and ventilated warehouse with regular sterilization. The storing environment temperature is -20-60°C, relative humidity is 10%-80%RH non-condensation, and atmospheric pressure is 86-106kPa.

### 7.4 Transport:

The product is packed in a carton, with air column bags inside.

Transport temperature is -20-60°C. Transport shall prevent rain, exposure to the sun and weight stacking, following provisions of the order contract.

### VIII. Common faults/issues and troubleshooting

No.	Fault	Cause	Troubleshooting
1	Panel has no display	1. No power 2. Loose DC24V interface	1. Check whether power adapter is normal 2. Check whether connection between DC24V interface and alarm is loose
2	Trigger no alarm sound in case of low gas source pressure	Loose input signal	Check whether input signal connector is loose
3	Misplaced alarm indication	Incorrect connection of left and right input signals	Re-wiring

## **IX. Technical support**

1. GENTEC has many experienced engineers to provide top services for you. When you contact us, please provide detail information of relevant applications below and correct information to assist rapid troubleshooting:

- 1) Model.
- 2) Operation.
- 3) Fault.
- 4) Troubleshooting.

2. Unless otherwise specified in an order contract, the product is beyond warranty period since it is delivered due to material or processing defect. The product is not covered by warranty due to damage, abnormal abrasion or improper operation.

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