

# Gas Pressure Alarm Box SGPA Series

Operation Manual



## Product Description

The SGPA Series, Gas Alarm Box, was designed as a method of ensuring the supply of uninterrupted gas, when used in conjunction with a Gentec single or switchover manifold system. Depending on the application and user request, an Indicating Pressure Gauge Switch (IPS) can be placed on high or low pressure sides to activate an alarm.

The unit consists of several components:

1. One, Two or Four channel alarm box with audio and visual alarm capability. See Figure 1.
2. The alarm can be operated with voltage of 120vac or 220vac. To change the setting, the back cover must be removed.
3. One Power Cord and Input Connector to connect to dry contact switch wires.
4. Each unit comes complete with GREEN (RUN or "IN USE") indicator lights for each channel to indicate a pressure level above the IPS set point, RED (PRESSURE LOW or "REPLACE CYLINDER") indicator lights for each channel to indicate low pressure or empty status and additionally, a GREEN button at the bottom of the alarm box to ("SILENCE") the alarm when activated.

## Installation

The enclosure shall be mounted firmly to the wall. It is the installer's responsibility to select the correct mounting hardware, depending on the mounting surface.

1. Remove the five (5) screws from back plate.
2. Measure the alarm box for placement by using the back plate as a template.
3. Insert three flat head screws into the three holes that will hold and firm up the alarm box. See Figure 3.  
WARNING: The enclosure is not rated, and should not be used in a hazardous area where flammable gases or vapors may be present.  
NOTE: This enclosure should be mounted within ten feet of a 120 VAC outlet.
4. Mount the alarm box onto the screws to hold firmly.
5. Connect the power cord and the connector cord to tie in the dry contacts (IPS). See Figure 2.
6. Crimp the wires from the gauge switch (IPS) on the regulator or manifold.
7. Connect either the left IPS or right side IPS to the connector cord supplied with the unit.
8. Match the connecting wires per the diagram in the operation manual package.

## Operation

1. Push the pinned input connector plug supplied into the alarm box.
2. Push the power cord connector supplied into the alarm box.
3. Plug the power supply into a suitable 120 VAC receptacle.
4. Turn on the power switch - red switch on the right side of alarm box, the front panel should display one of the following states:
  - a. If one or both sides of the manifold or switchover manifold system are below the IPS set point, the red lights will be lit, and the audible alarm should sound. Pressing the SILENCE button will silence the audible alarm, but will not reset the lights to green.
  - b. If both sides of the switchover manifold system are above the IPS set point, the IN USE green button will light, and the audible alarm will not sound.
  - c. If one side of the switchover manifold system is below the IPS set point, the red light on that low side will be lit, and the audible alarm will sound. The other side above the set point will display the green light. Pressing the SILENCE button on the front of the alarm box will silence the audible alarm, but will not reset the light to green.
5. The SGPA lights will reset from red to green only when the pressure is above the set point of the IPS. That is, the reset function will be triggered automatically when the IPS is pressurized above the set point.
6. The audible alarm will not sound for another low pressure red light after the first SILENCE button is pressed and its red light remains on. Thus, a depleted cylinder should be changed when the first alarm sounds to prevent the switchover system from running out of gas completely.



Figure 1

### Switch and Connectors Four (4) Channel Gas Alarm Box

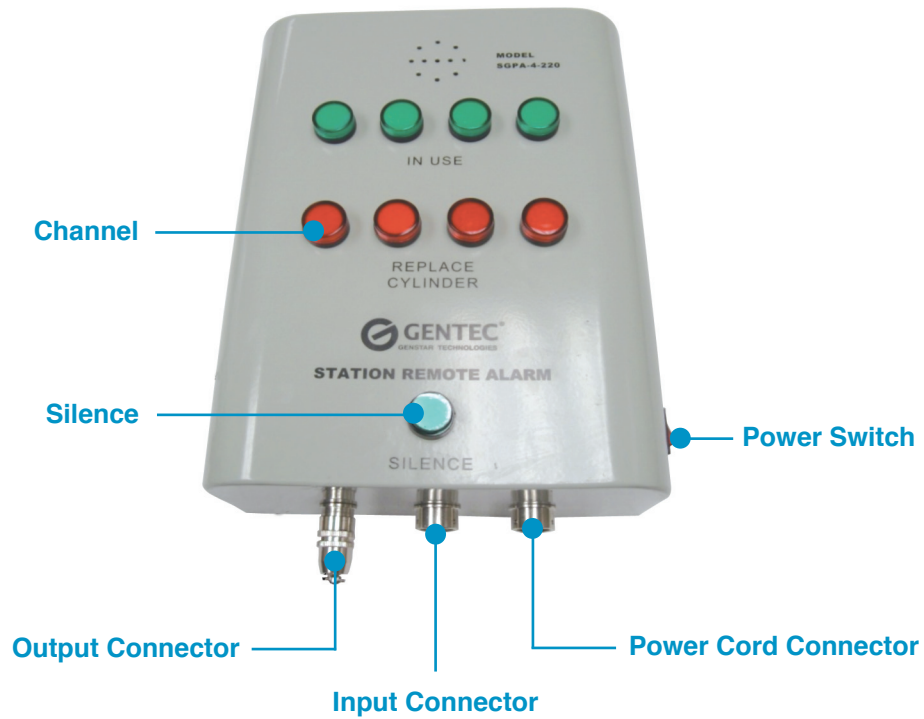


Figure 2

Note: See Diagram in the operation manual package for proper wiring configuration scheme.

**Alarm Box Dimensions**

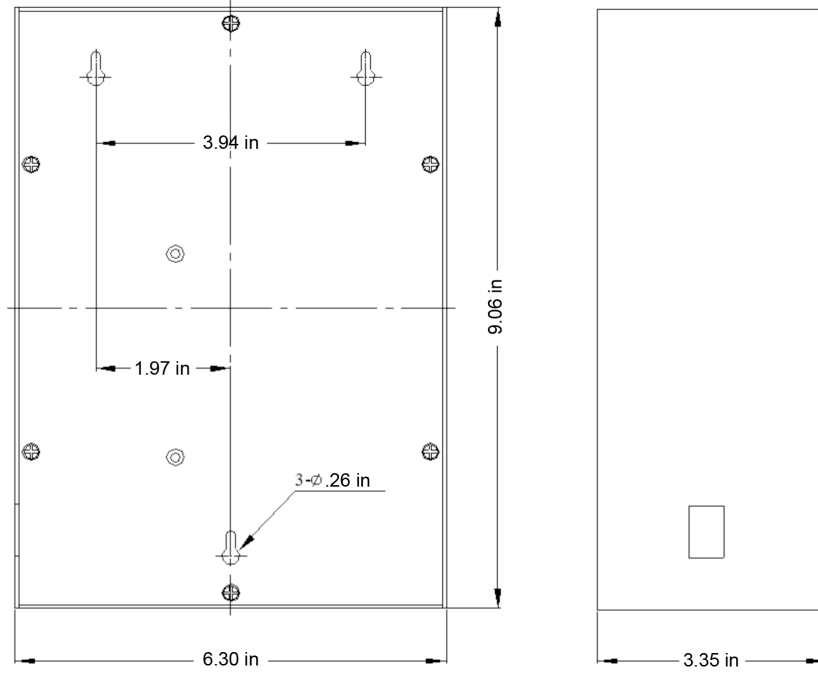


Figure 3