

Dual Ionization Gauge Connector Box

Option O100IG

The standard IGC100 controller can connect to, and display pressures from, only one ionization gauge. The Dual Ionization Gauge Connector Box (SRS Model # O100IG) is an optional component that, when attached to an IGC100, makes it possible to simultaneously connect two ionization gauges to the IGC100. An IGC100 properly fitted with the O100IG optional box can switch operation between two independent ionization gauges (i.e. sequential operation) from the front panel, and measure pressure at a first or second location (IG1 or IG2) at a small fraction of the cost of a second instrument.

The O100IG option is easily installed in the field making it easy to extend the capabilities of the IGC100 controller as needed.

In This Application Note

What does the Kit include?	3
Installation	3

What does the Kit include?

The O100IG Option Kit includes all the components required to add a second ionization gauge connection port to your IGC100 controller. The basic package includes...

1. Dual Gauge Connector Box.
2. Connection Cable (connects O100IG box to IGC100 controller)
3. Mounting pins (for side mounting)
4. Fastening screw (for side mounting).
5. Instructions sheet.

Installation

IMPORTANT

For the most compact design and safest operation, SRS recommends you mount the O100IG box on the left side of the IGC100 controller as shown below in Fig. L-1. However, side mounting is not a requisite for the proper operation of the O100IG option (i.e. steps 1 –4 of the following installation procedure are optional).



Figure L-1. Side Mounting configuration.

A few steps are required to complete a side mount installation...

Step 1

Working on the back end of the left side of the controller box, remove the top and bottom cover screws as shown in Fig. L-2. A #2 Phillips screwdriver is required.



Figure L-2. Remove of the top and bottom cover screws from the back end of the left side of the IGC100.

Step 2

Replace the screws with the Mounting Pins included in the O100IGC Kit.



Figure L-3. Mounting pins in place.

Step 3

Mount the O100IG box on the left side of the IGC100. Insert the side pins into the round holes of the keyhole shaped slots located at the bottom of the O100IG box, and pull the box forward, towards the front of the controller, so that the box locks in place (i.e. the pins slide into the keyhole slots).

Step 4

Fasten the O100IG box to the side of the IGC100 controller using the Phillips screw included in the kit, as shown in Figure L-4.



Figure L-4. O100IG box must be fastened to the side of the IGC100 controller.

Step 5

Electrically connect the O100IG box to the IGC100 using the Connection Cable included in the kit. The male cable connector end attaches to the ION GAUGE port on the back of the IGC100, while the female cable connector end attaches to the IGC100 port on the O100IG Box. Figure L-5 shows a completed connection.



Figure L-5. Connect the IGC100 Ionization Gauge port to the O100IG Box.

Step 6

Connect the ionization gauges to the IG1 and IG2 ports of the O100IG box, using signal cables purchased directly from Stanford Research Systems. Connect the collector cable BNC connectors to the Collector ports labeled 1 (for IG1) and 2 (for IG2) on the back of the IGC100. The system is now fully configured for dual gauge operation and ready to go.

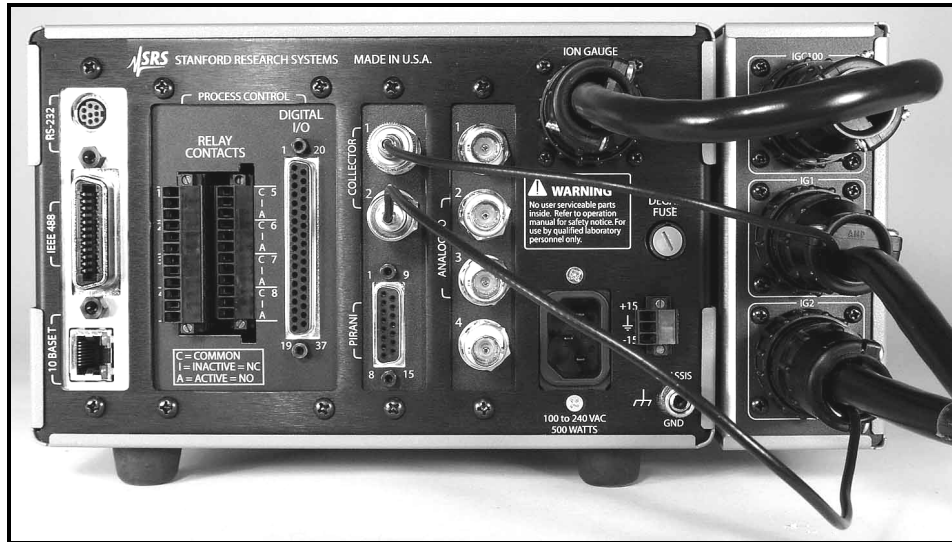


Figure L-6. An IGC100 with an O100IG option installed and two Ion gauges connected to its back panel. Decide up front which gauge you want to connect to the IG1 port and which one to the IG2 port.