

GT series Calibration Station

MIXED GASES - INSTALLATION & USE

GMI Part Number: 67102 (67102Q)

Incl. PC Controller: 67621 (67621Q)

INSTRUCTION SHEET

The automatic calibration station, Part No. 67102 with 6mm. fittings (67102Q with 1/4 inch fittings), provides a safe and convenient method of calibrating the GT series instrument. The calibration station for mixed gases should be mounted on a vertical surface for best results.

Wall mounting the calibration station:

If wall mounting calibration station, hold unit complete with backplate in required location on wall then, using backplate as a template, mark (4) hole positions on wall. Use (4) suitable screws (and rawplugs if positioning the unit on a brick wall) to secure. The calibration station backplate can be removed, if required, to mark hole positions more accurately. Refer also to paragraph 3 below: permanent power cable connection.

Calibration station power supply 67102(Q):

There are three methods of providing power to the GT series calibration station 67102(Q).

1. Via a 12V PSU (GMI Part No. 12444) located in a socket on the top face of the calibration station. Refer to Fig. 2.
2. Via a 12V vehicle power supply (GMI Part No. 12988) also located in a socket on the top face of the calibration station. Refer to Fig. 2.



Fig. 2 12V Power Socket - Top

3. Via permanent 12V power supply cable. This requires removal of backplate before wall mounting the unit, procedure as follows:



Fig. 1 GT series instrument located in (Mixed Gases) Calibration Station

- a) Remove (6) screws that attach backplate to the calibration station.
- b) Remove blanking plug from underside of unit.
- c) Fit 20mm. (3/4 in.) cable gland - size to suit cable. Note max. wire cross section area = 2.5mm²
- d) Connect permanent 12V power supply cable to J25 connector on calibration station PCB. (observe correct polarity). Refer to Fig. 3.
- e) Replace backplate then secure using (6) screws.

Calibration station power supply 67621(Q):

The GT series calibration station 67621(Q) is powered via 12V power supply cable from PC Controller unit. The PC Controller unit is powered via mains cable (both cables are supplied with the unit).

1. The 12V power supply cable from PC controller is located in a socket on the top face of the calibration station. Refer to Fig. 2.

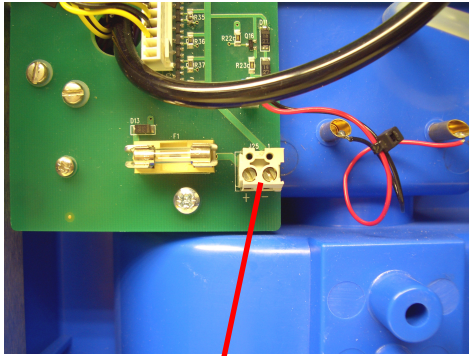


Fig. 3 J25 Connector

Calibration Station Gas Supply:

The gas bottles may be conveniently attached to the side of the station. Connect to swage connector gas inlets using nylon tubing, 6mm. (1/4 in.) outer diameter, with a pressure regulator that will supply 590 to 690 mBar (8.5 to 10 PSI). This is available from GMI (P/N 67257).

Swagelok connectors must be finger tightened then, using two spanners, tighten a further 1 1/4 turns. Do not overtighten.

Typically calgas 1 is a gas-mix containing LEL, and calgas 2 would be volume gas methane. The PPM can be calibrated by using the LEL and blending it down with air.

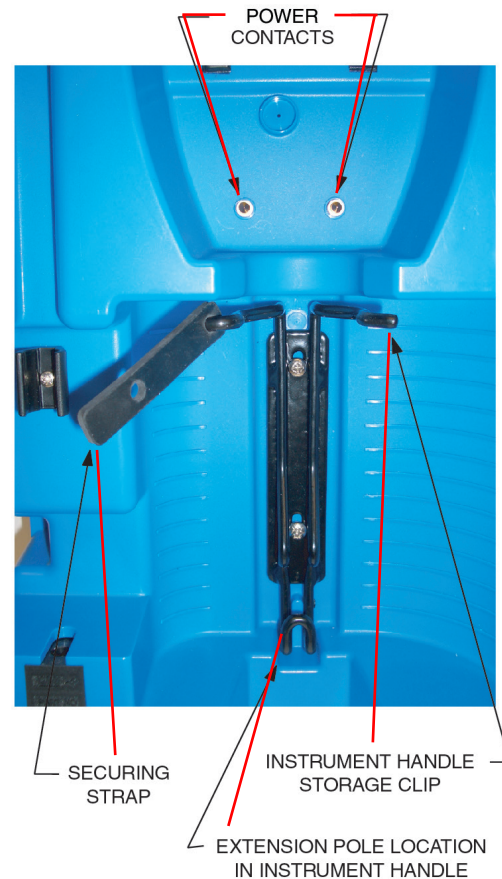


Fig. 4 Instrument Location

Calibration station computer connection and driver software:

* The calibration station has a USB connector that can be easily connected to a free USB port on the computer. (* not applicable to 67621 and 67621 Q)

Install the software from the enclosed CD-ROM to initially set up the gases.

Start the software. The first time you will be asked to select the com-port.

Install instrument in the Calibration Station

Make sure that the power contacts, on the back of the GT instrument and on the calibration station (shown in Fig. 4), are clean and free of dirt / grease. As detailed on calibration station instructions label, carefully position the GT in its docking location, as shown in Fig. 1, with the bottom part first, placing the extension pole recess at the bottom of the GT so that it docks with the holding clip shown in Fig. 4. Push the instrument backwards so that it is located between the two holding arms then engage the securing strap. Locate the probe as shown in Fig. 1.

Follow the further instructions on the front of the calibration station.

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