

Volume

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SCHAUENBURG ELECTRONIC TECHNOLOGIES

A Division of the Schauenburg Group of Companies

Gas Detection Instrumentation (GDI)

**Observer
Calibration / Test
Users Guide**



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Introduction

This manual contains information on the working operation of the Calibration / Test station that must be understood and adhered to. The reliability and safe working operation of the Observer gas detection instrument is dependant on correct calibration and testing.

All users of GDI equipment must be trained and/or educated on the use and service of the OEM (Original Equipment Manufacturer) supplied equipment.

The safety of the persons using the Observer gas detection instrument is dependant on the condition and serviceability of the calibration station.

It is and remains the responsibility of the user to comply with the laws and regulations of the country where the calibration and test equipment is used.

TAKE CARE WHEN HANDLING INSTRUMENTS, THEY SAVE LIVES.

The Observer calibration / test station consists of up to four gas inlet points with a flow meter for each gas diffusion ports. The unit also has a 60 second timer that is activated if the flow is opened to a specific port using the selector valve.

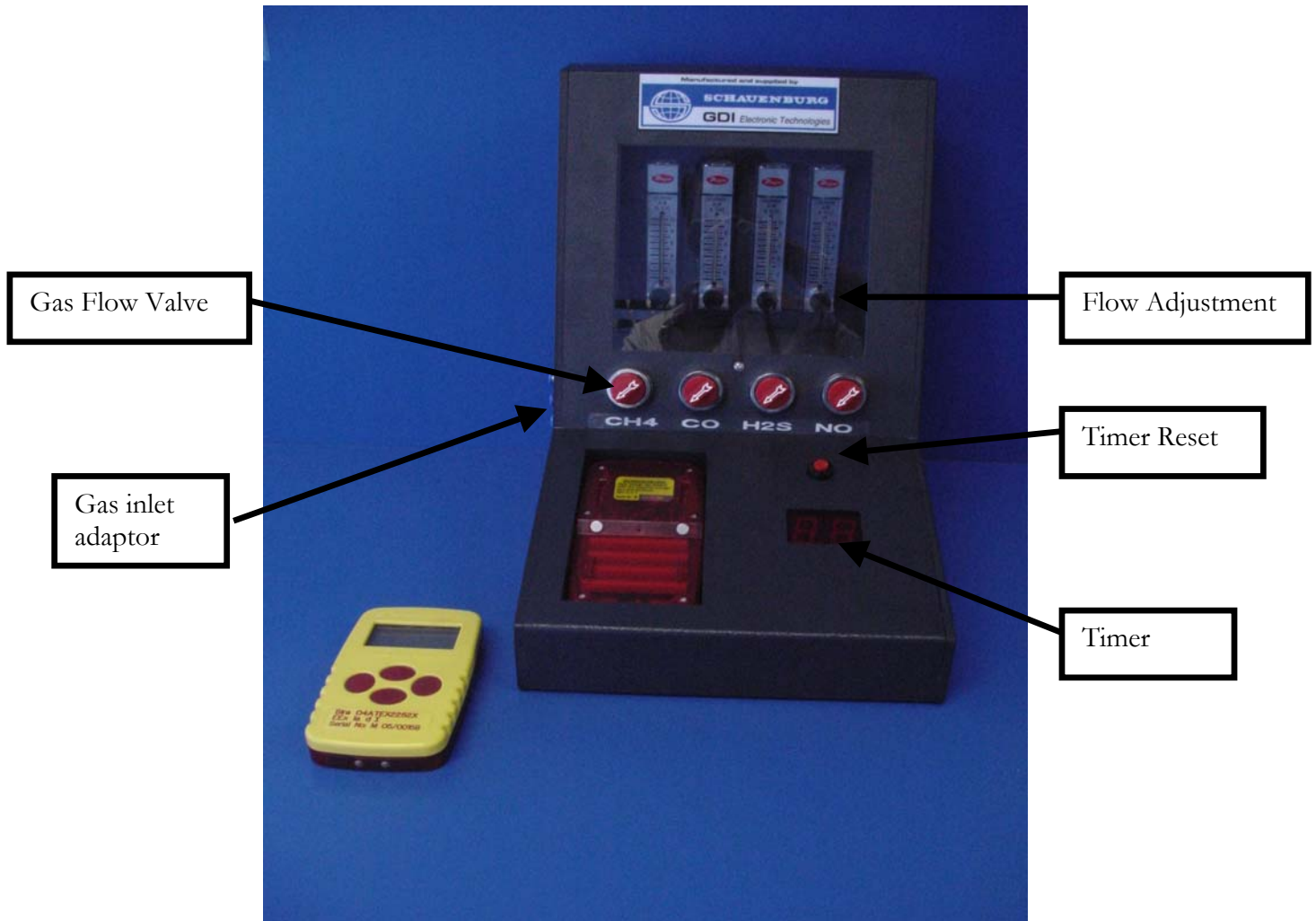
Specification

Input Pressure	250 – 320 kPa
Sample Flow rate	10-25 litres per hour
Operating temperature	-10 to + 40°C
Storage temperature	0 – 20°C
Power source	80-230Volt AC input / 12 Volt 1Amp DC output
Dimensions	260 x 330 x 365 (mm)
Weight	6 Kg
Housing	ABS plastic
Warranty	* 1 (one) year on all electronic parts and workmanship

Calibration / Test Station functionality

Buttons of the Calibration / Test Station

Please take note of the functionality of the knobs, buttons and gas inlets installed on the face and side of the calibration / test station.



Functional Notes:

- **Flow adjustment knobs**
These knobs are used to control the flow rate of the gas applied to the sensor-gassing bay. The normal flow rate for maximum effectiveness is between 10 and 25 litres per minute. (I.e. Between 100 cc to 250 cc on the flow meter). Do not make the flow rate too high as this will have a cooling effect on the sensor and can have a negative effect on the sensor performance.
- **Timer reset button**
This button is used to reset the timer. The timer count value is from 1 second to 60 seconds and the main purpose is to verify the time response of the sensors on the Observer instrument. The timer is automatically activated when the **Gas Flow Valve** is opened.

- **Gas flow valve**

These valves are used to open the selected gas onto the selected sensor when testing or calibrating a specific gas on the Observer instrument to verify the working or calibrated results.

- **Gas inlet adaptor**

This is the main inlet for each gas sensor type used in the Observer instrument. Inlet pressure from the regulator valve must be +/- 300 kPa to be able to activate the timer pressure sensor. All input adaptors fitted have a 6mm diameter fitting.

After all adjustments have been made to the Calibration / Test Station the instrument can be placed into the aperture and the relevant gas flow valve opened to either test or calibrate the instrument as described in the Observer instrument manual.



To remove instrument from Calibration / Test Station press on the bottom of instrument.

Take instrument on both ends and remove from aperture.