

AGS Detector TFT



SPAN CALIBRATION GUIDE

Regular maintenance and calibration of the sensors by trained technicians is recommended. Inspections and services must be documented and executed at regular intervals. The frequency must be determined and observed by the person responsible for the gas warning system according to all regulatory, code and legal requirements. The inspection interval is normally 12-18 months to retain optimum safety.

Safety Statements

- ⚠ Acknowledge any alarms or faults before attempting to begin the calibration process.
- ⚠ When entering span adjustment function, the detector will enter special mode, and will remain offline until the adjustment is successful, or power is reset.
- ⚠ At elevations higher than 6,560' (2,000m), calibration will result in a lower reading.
- ⚠ Response and recovery times may vary with when performed outside the parameters of factory calibration i.e., temperature, air velocity and flow rate.
- ⚠ Give at least seven (7) minutes between testing the same unit or until gas has fully dispersed.
- ⚠ Sensors should be calibrated if the measuring range has been exceeded, which can shorten the sensor lifetime and/or reduce its sensitivity.

Span Calibration Test Gases

- ⚠ All calibration test gases are classified as non-flammable and non-toxic, however, they do contain gas under pressure and may explode if heated and cause asphyxiation in very high concentrations.
- ⚠ AGS gas mixtures are prepared using equipment traceable to N.P.L / ISO standards.
- ⚠ Cylinders should always be stored in the vertical position and secured to prevent them falling over.
- ⚠ Ensure valve/regulators are screwed and secured tight before use and ensure valves are closed after use.
- ⚠ Safety Data Sheets are available on request.

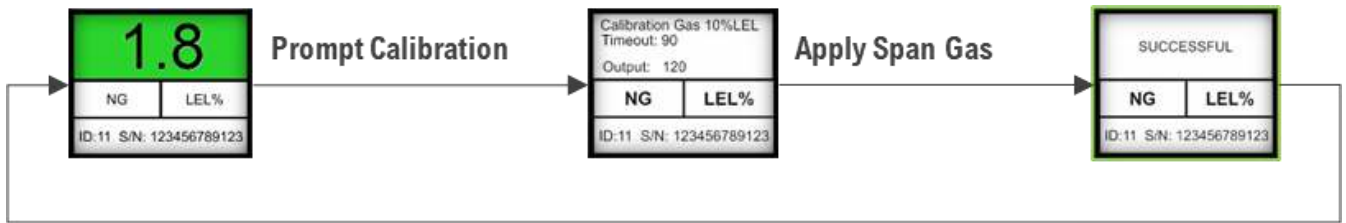


Target Gas	Formula	Concentration	Balance/Mix	Flow Rate	°F/°C	Application Time
Carbon Monoxide	CO	120ppm	Air	0.5L Per/Min	59-86°F 15-30°C	<60s
Natural Gas/Methane	NG / CH ₄	0.5% BV (10% LEL)				<120s
Propane (LPG)	C ₃ H ₈	0.2% BV (10% LEL)				<120s
Hydrogen	H ₂	0.4% BV (10% LEL)				<120s
Nitrogen Dioxide	NO ₂	2ppm				<120s
Oxygen	O ₂	Fresh Air (20.9% V/V)	Nitrogen			

All persons required to handle gas should be able to identify the following: -

- The cylinder and its contents.
- Properties and hazards of the gases.
- The 'use by' date and unique batch number.

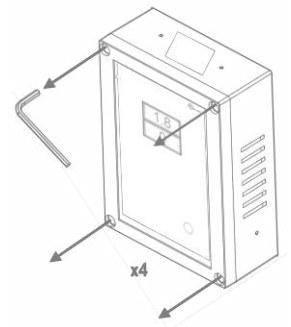
Procedure



Equipment: 1x M3 Socket Wrench / 1x Tweezers or metal jumper / 1x Calibration Kit

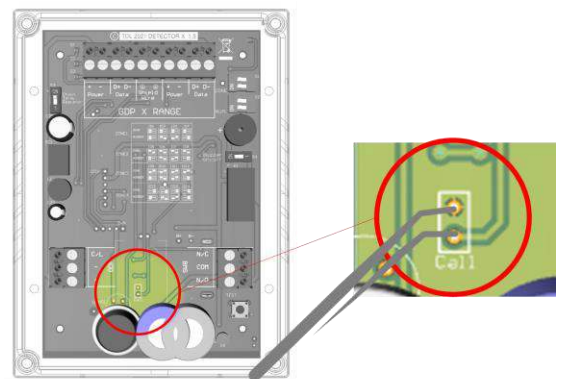
Preparation

Fix any regulators, pipes, and mask to gas cylinder.
Unscrew the four bolts of the device using an M3 socket wrench.
Carefully remove the front fascia to expose the circuit board.



Prompt Calibration

Short out the [Cal1] header for ~10 seconds.
The device is now in **Span Calibration Mode**.

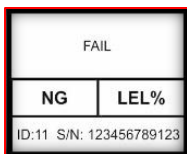


Apply Span Calibration Gas

Open valve (before applying the mask) to allow for pressure release.
Hold mask over the gas sensor and apply gas.
Apply gas until 'SUCCESSFUL' message appears on screen.

Calibration Complete. The device will automatically return to normal operation.
Remove mask, turn off gas and secure front fascia with M4 bolts.

Calibration Fail.



If calibration results in a "failure" message, repeat process ensuring all parameters are met.
If unsuccessful, contact your supplier.

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