

PCF MOD. C 2011, DUAL HOT FID VOC PORTABLE MONITOR COMMISSIONING AND CALIBRATION CARD

We congratulate you on choosing our instrument. As soon as you receive the Mod. C 2011 check that the instrument has not suffered in the shipment, especially mechanical damage. Next, open the top cover and check that all internal parts are firmly in their housings, especially the electronic boards, ICs and connectors.

To work properly, Mod. C 2011 will require the following supply gases (find the adjustment controls in the compartment accessible from the front panel:

Gas	Scope	Specs	Source	Pressure from source (< 6 Bar)	Connections on rear panel	Checked Pressure on Mod. 2005 gauges
H₂	FID supply	Pure (99.999) HC <0.01 ppm	Gas cylinder or in built H ₂ Generator	≥ 2.5 Bar (≥ 36 Psi)	H ₂	See final check record
Pure Air	FID supply and carrier gas	HC <0.01 ppm	In built Air generator with hot efficient scrubber (Gas Cylinder)	≥ 2.5 Bar (≥ 36 Psi)	AIR FID	See final check record
Calibration Mixture	Check or calibrate TVOC/THC	Mixture must be with air balance (suggested, 60-80% of sel. range)	Certified gas cylinder or from multi point calibrator	Vented (Ambient pressure)	SPAN	Low pressure (0.1 Bar, 1.5 psi) better if vented

Please Note:

- 1) Power the instrument with the correct power supply (see the plate on the back).
- 2) Connect the gas supplies as indicated above.
- 3) For instruments with FID, to obtain a high reproducibility, an air for the FID with a low HC content <0.1 ppm must be used).
- 4) If you use low quality FID air, you will have poor results in terms of detection limits, accuracy and reproducibility.
- 5) Complete control of the operation of the instrument is ensured by a 'user friendly' menu on the 'Color screen' type of the DAS.
- 6) After turning on the instrument with the switch, wait for the instrument to warm up (about 15-20 minutes) then, if the instrument is not programmed for automatic ignition, turn on the FID by pressing the 'IGNITE' icon.
- 7) After switching on the FID, the FID alarm will disappear and the instrument will start working.

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The FID is an extremely stable detector. Do not play unnecessarily with the calibration procedures, if it is not strictly necessary, let the instrument work for a few days then check or perform a complete calibration.

The instrument is configured to be calibrated with a low concentration cylinder; if you calibrate it using a multi-point dilution calibrator, feed the gas through the 'SAMPLE' line and close the 'CAL / ZERO' inlets, to avoid gas mixing.

Calibration check

Do not change the Calibration Factor (Kcal = ADJ) using the potentiometers on the front panel, first check only the calibration of ZERO and SPAN.

Once you have selected Zero or SPAN, follow the instructions.

Remember to supply the calibration mixture at very low pressure, <0.1 Bar, or better by free circulation in the air (vented).

The methane fraction channel can be independently controlled.

Full Calibration [the Kcal (ADJ) will be updated].

- 1) The instrument is working regularly on the [MONITOR] sampled gas.
- 2) Feed the calibration mixture either from a cylinder with sample gas or from a diluter (in this case the ZERO or SPAN inputs must be closed).
- 3) Select SPAN or ZERO and proceed as from the interactive menu.
- 4) Once the instrument has been calibrated, close the 'SPAN / ZERO' sources.
- 5) The methane fraction channel can be calibrated independently.

I / O electrical connections (see the DAS Manual on this subject)

RS 232-485, in accordance with international standards.

Ethernet / LAN, as per international standards.