

Calibration Accessory (RGR CALKIT) for Gas calibration

How to set up the RGR CALKIT gas calibration accessory.

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INTRODUCTION

RGR CALKIT can be used to calibrate all Aeroqual sensor heads except ammonia, perchloroethylene, ozone and dust.

Gas calibration using the RGR CALKIT should always be completed in a location with adequate ventilation.

TOOLS:

- Gas regulator (1)
- Calgaz gas cylinders (1)
- 1/8" I.D. Tubing PVDF (1)

PARTS:RGR CALKIT Calibration Accessory (1)

Step 1 — Connect tubing to calibration accessory



- The calibration accessory has barbed fittings that are intended to fit with 1/8" ID tubing.
- ▲ Care should be taken in selecting a tubing material that is appropriate for the type of gas that you will be using to calibrate the sensor head.
- PVDF tubing is appropriate for most gases but the tubing's datasheet should be consulted for a full list.
- Either side of the calibration accessory can be designated the inlet or the outlet.
- ▲ Not all gas that enters through the inlet exits through the calibration accessory outlet; be advised that some gas exits through the sensor head exhaust. Depending on your calibration gas of choice and concentration levels, you may need to perform this calibration under a fume hood.

Step 2 — Attach regulator to gas source



- Make sure the valve on your flow gas regulator is fully off.
- Screw the gas regulator onto your gas cylinder. When the regulator is correctly fitted, the pressure indicator will show the cylinder pressure.
- Always point the cylinder and regulator away from yourself and others when attaching or removing a pressure regulator.
- Secure the cylinder so it can't be knocked over while the regulator is attached.

From Gas Source

Step 3 — Connect tubing to gas source and ventilation

- Connect tubing to gas source and ventilation.
- Either side of the calibration accessory can be designated the inlet or the outlet

Step 4 — Attach the calibration accessory to the sensor head while the head is plugged into the Ranger



- Attach the sensor head to Ranger
- Turn Ranger On
- Attach the calibration accessory to the sensor head

Step 5 — Gently turn the valve on the regulator and begin to flow gas at >1L/min



- Check the cylinder pressure to ensure there's enough gas to perform the calibration (10% of full pressure should be enough).
- Gently turn the regulator valve anticlockwise and flow the target gas at >1L/min until the reading stabilizes (about 10 minutes).

Step 6 — Wait for the gas reading to stabilize		
12:47 NO ₂ ppm	≈	 Wait for the gas reading to stabilize on the display of the Ranger
Location 01	May 17/23	

For further support, contact Aeroqual Support.