

Quick Reference Guide S-2 Series

Note: All adjustments should be made in a fresh air area

Required Materials:

- Appropriate calibrate kit for S-2 Series transmitters with .5 lpm fixed flow regulator and appropriate calibration cup and tubing.
- Digital multi meter with millivolt range
- Small flat blade screwdriver

FRESH AIR ADJUSTMENT

- If S-2 transmitter is wired to an RKI Controller, verify that the S-2 transmitter is wired to the appropriate terminals in the RKI Controller.
- Remove the lid from the explosion proof junction box
- Power up the controller and allow the sensor to stabilize for 1 to 2 minutes.
- Using your digital multi meter, set the meter to read millivolts and plug the black meter lead into the black test jack on the amplifier, and the red volt meter lead into the red test jack on the amplifier.
- For LEL and Toxic gas transmitters, the voltmeter should be reading 100 mV in fresh air.
- For an O2 transmitter, the fresh air reading should be 434mV.
- Using a small flat blade screwdriver, locate the ZERO pot (on LEL and Toxic gas transmitters, SPAN on Oxygen transmitters) and adjust the pot for fresh air readings. Please note: if you suspect that the atmosphere may not be gas free, apply zero air to the sensor to achieve a proper fresh air reading.
- To calibrate an S-2 transmitter, assemble the proper calibration kit. The example below assumes you are calibrating a standard combustible gas transmitter to methane.

GAS CALIBRATION

- Assemble the appropriate calibration kit for the S-2 Transmitter used
- Place the RKI controller in calibration mode. Set calibration time out to an appropriate amount of time required to complete the calibration.
- Plug your volt meter into the test jacks on the amplifier.
- Verify the reading is set to 100mV (zero percent LEL methane)
- Attach the calibration cup to the LEL sensor
- Open regulator allowing gas to flow to the sensor
- Allow gas to flow over the sensor for a maximum of 2 minutes.