

# Technical Bulletin

## 43i-TLE Pre-Calibration Setup

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### **Description:** 43i-TLE Pre – Calibration Setup Procedure

#### **43i-TLE Pre-Calibration Procedure:**

1. Flow zero air to the instrument until the zero reading has stabilized.
2. Go to the calibration factors menu and reset the user cal defaults.  
**Note:** This will set the SO<sub>2</sub> BKG to Zero and the SO<sub>2</sub> Span Coefficient to 1.00
3. Go to the instrument controls menu and toggle service mode ON.
4. In the service menu scroll down to flash voltage adjustment and set the lamp voltage for 1000 Volts.

Remember to press the save button!

5. While still in the service menu, scroll down to Initial Flash Reference.  
Set the current reference voltage as the initial by pressing the save button.  
This is now set.

This voltage should be between (1.0 volts – 2.0 volts for a 43i-TLE)

**Note:** If voltage is > than 2.0 Volts, lower lamp voltage in order to set the Initial Flash Reference.

6. Now flow your calibration gas that you would normally calibrate the instrument for.  
Verify the range is correct for the gas you are flowing.

**Note:** If setup for dual range, use the Hi range calibration gas.

7. Allow the gas reading to stabilize and go back to the service menu and scroll down to PMT Voltage adjustment.

In this screen adjust the PMT voltage until the SO<sub>2</sub> gas concentration matches the bottle value or the correct value after dilution.

Remember to press the save button!

8. At this point you will need to flow the zero air again.  
This will be used for the zero calibration, so make sure the zero gas flows long enough for a good stable zero reading.

9. Go to the calibration menu and calibrate the SO<sub>2</sub> BKG.  
Zero is now calibrated.

10. Now flow the span gas and calibrate the SO<sub>2</sub> COEF in the calibration menu, SO<sub>2</sub> is now calibrated.

The unit is now calibrated and your SO<sub>2</sub> COEF should be close to 1.00

If you need any further assistance or technical information regarding this matter, please contact our Technical Support Team at 866-282-0430 (*Press 2 for Technical Support*)