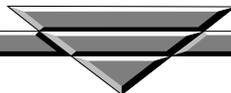


# TechTIPs

The latest from PerkinElmer Photovac

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## **MicroFID Flame Ionization Detector Operational Reference Guide**

### **INTRODUCTION**

This TechTIP is a reference guide for day to day operation of the MicroFID Flame Ionization Detector. For more detailed information, please refer to the MicroFID User's Manual.

The MicroFID measures the concentration of airborne Volatile Organic Compounds (VOCs), displays and then records these concentrations. It does not distinguish between individual compounds. The reading represents the total concentration of all VOCs present in the sample. MicroFID will display concentration in PPM.

### **TUTOR KEY**

To assist you in learning the key functions, MicroFID has a built-in tutorial session that displays a two-line description of the function of each key.

- Press the TUTOR key to begin a tutorial session
- Press the EXIT key after any other key to end the session

*Note:* While in the tutorial session, key presses have no effect on the MicroFID's operation.

### **CALIBRATION**

*Note:* The hydrogen cylinder must be filled prior to operation.

Before beginning calibration, ensure you have a reliable source of zero air and calibration gas.

- Select the CAL key.
- Select the desired Cal Memory. The MicroFID has 10 Cal Memories and can be calibrated with 10 different span gases or response factors if desired. Only one Cal Memory can be used at a time. Each Cal Memory stores a different Response Factor, zero, sensitivity, and alarm level.
- Key in desired Response Factor and hit Enter.

*Note:* If the Response Factor is not listed in the User's Manual or if you are measuring complex VOC mixtures, use a value of 1.00.

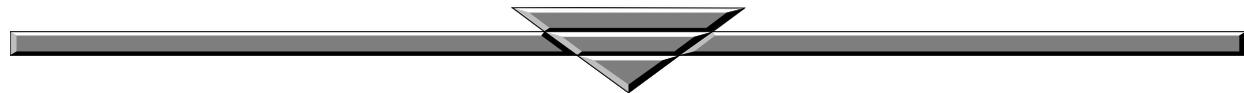
## **CALIBRATION Continued**

- Select Low Range or High Range and hit Enter. Use Low Range if you are sampling concentrations between 0.5 and 2000 ppm (methane equivalents). Use High Range if you are sampling concentrations between 10 and 50,000 ppm (methane equivalents).
- Connect the supply of zero air. If you are using room air press Enter. If you are using a gas zero air, connect the gas bag adapter to the inlet. Open the gas bag and press Enter. Zero calibration will take 60-90 seconds.
- MicroFID prompts for the span gas concentration. Enter the known span gas concentration and then connect the span gas.
- Press Enter and MicroFID sets its span. Span calibration will take 60-90 seconds.
- Press the Alarm key and enter the alarm level for the selected Cal Memory.

Calibration is now complete and the MicroFID is ready to sample.

For further information contact your area representative or the nearest Photovac office:

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