

Calibrating the Rectangular Reference Microphone for FP35

This procedure describes how to calibrate the rectangular reference microphone that is part of the new style integrated probe microphone set. This microphone is not normally available on FP35 analyzers manufactured before November 2008.

From the Opening Screen, press [MENU] and [F3] twice to enter the Microphone Calibration Screen.

1. Select the port the microphone is plugged into. The “internal mic” is the connector located inside the internal sound chamber. The “external mic” is the connector located on the front of the analyzer. Normally, the integrated probe microphone is plugged into the external mic port.
2. Attach the rectangular reference microphone adaptor into the sound calibrator.
3. Remove the reference microphone from the integrated ear hook and insert it into the calibration adapter with the opening of the reference microphone pointing into the calibrator. See Figure 2. You can use a rubber band to hold the microphone in place on the calibrator. See Figure 3. Turn on the sound calibrator.
4. Use the arrow keys to select “Custom Reference Mic Cal.”
5. Press [START/STOP] to start the calibration.
6. Use the up/down arrow keys to adjust the “MEASURED dBSPL” until it matches the output of the calibrator. Pressing the keys briefly will result in 0.1 dB changes. Holding the buttons down will result in 1 dB changes.
7. Once the “MEASURED dBSPL” matches the calibrator, press [EXIT] to return to the Microphone Calibration Screen.
8. Press [F5] to store the calibration.



Figure 1: Rectangular reference microphone adapter.

Figure 2: Rectangular reference microphone inserted into sound calibrator.

Figure 3: Using a rubber band to hold the microphone in place on the calibrator.