

NoiseMeters Limited

High-range microphone option instructions

CEL63x MIC1 165dB High-range option

MIC1 High-range microphone option

The standard CEL 63x series sound level meters have 1/2 inch diameter CEL-251 (Class 1) or CEL-252 (Class 2) microphones that have been designed to measure sound pressure levels of up to 140dB.

For specialist applications where sound pressure level measurements of up to 165dB are required NoiseMeters Ltd can offer the MIC1 High-range microphone option. ** Please note for normal noise at work or environmental measurements use the standard microphone supplied **

Overview

1. When very high noise levels are required to be measured we need to use a smaller 1/4" diameter microphone which has a different sensitivity and can withstand and react correctly to higher pressure waves due to its smaller diameter and design.
2. These higher levels may be required for applications such as controlled explosions, firing ranges, firework testing etc.

Components required to enable the High-range option

1. MIC1 1/4" high-range microphone
2. MPA1 High range 1/2 inch to 1/4 inch adaptor
3. CEL4726 1/4" Adaptor for CEL120/1 or CEL 120/2 acoustic calibrator

Setting up the High-range option

1 Fit the MIC1 and MPA1 to the instrument

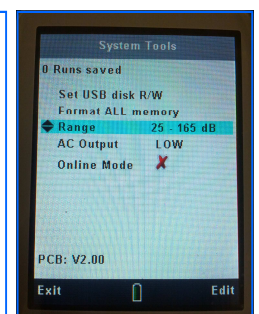
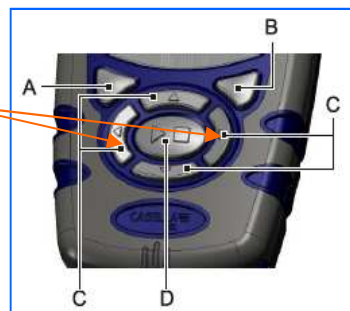
- ✘ Carefully remove the existing microphone capsule by gently twisting anticlockwise
- ✘ Fit the microphone adaptor
- ✘ Carefully fit the 1/4" microphone

1/4" microphone



2 Set up the instrument firmware

- ✘ Switch on the instrument and then hold down the 'C' Left and Right navigation keys simultaneously. The "Systems Tools" screen will appear (see images to the right).
- ✘ Select and edit the range to the 25 – 165dB option
- ✘ The instrument will remember this configuration each time it is switched on. Remember to reconfigure if the standard 1/2 inch microphone is used.



3 Fit calibrator adaptor to the acoustic calibrator

- ✘ Insert the red CEL4726 1/4" Adaptor into the acoustic calibrator
- ✘ Following Step 2, the sound level meter will automatically set the calibration offset to correctly detect a level of 140dB from the acoustic calibrator.

