Model 103 & 104

Dual Level Acoustic Calibrators

- Compliant to IEC 60942:2017 standard for acoustic calibrators
- Ergonomic and robust design
- Auto correction for temperature and barometric pressure
- Auto switch-off in normal mode and 'permanent-on' mode available
- Switch between 94dB or 114dB at 1kHz
- Fits ½ inch international standard microphones
- ¼ inch microphone adapter available

The Models 103 & 104 dual level acoustic calibrators allow you to quickly check the accuracy of your sound level meter or dosemeter thus complying with international regulations and codes of practice.

Great care has been taken during the design process to ensure that the units are comfortable to hold, robust and easy to use, whilst performing accurately throughout a wide range of temperature, humidity and pressure conditions.

In use they fit over the microphone of the instrument and produce a stable 1kHz tone at 94dB or 114dB, allowing you to switch between either frequecy at the press of a button.

The Model 103 meets the precision of Class 1 to IEC 60942, while Model 104 meets industrial Class 2.

The calibrators are powered by an easy to access single 9 volt battery giving many months or even years of operation. An automatic shut-off circuit ensures power conversation should you forget to switch the unit off after calibrating.

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Applications

Most noise related regulations stipulate that the sound level meter or dosemeter is calibrated before each measurement session and checked again before turning the instrument off. Noise measurements made for 'official' use, such as industrial health and safety or environmental monitoring, are not valid unless correct calibration procedures have been followed.

Operation

With the Models 103 and 104, the calibrator is placed over the microphone of the sound level meter and started by pressing the ON button, making sure the microphone is right inside the calibrator cavity. On older manual meters the calibration is adjusted, if necessary, using the small screwdriver supplied. On the later computer controlled meters, a CAL button is pressed and the internal computer automatically adjusts the meter to the correct reading. The additional 'permanent-on' mode can be selected to check the integration function of a sound level meter.

Specifications

Both units fully meet the requirements of IEC 60942, the model 104 at Class 2 level, and the Model 103 at Class 1 level. The IEC 60942 reference conditions are 25oC, 101.3kPa pressure and 65% RH.

EC CE classes	EN 61000-6-3:2007+A1:2001 EN 61000-6-1:2007
Pollution category	Portable equipment (2)
Sound Pressure	94.0dB ± 0.4dB (Model 104) 94.0dB ± 0.2dB (Model 103) 114.0dB ± 0.4dB (Model 104) 114.0dB ± 0.2dB (Model 103)
Frequency	1kHz (1000 cps) +/- 1%
Distortion	<2% THD
Microphone diameter	1/2" (to IEC 1094-4) Quarter inch adapter also available
Battery	1 x 9 volt, 6F22, 6LR61 or PP3
Physical dimensions	121mm x ø47mm
Weight	220 gms with alkaline battery
Operating control	Push button to start and set to 94dB. Push again to calibrate at 114dB. Automatic switch-off with green LED inidcation. User override of automatic switch-off.
Indicator	Green LED shows operation with good battery

Ordering Information

While both models can be ordered separately, they are most often supplied as part of the sound level meter measuring kit, the Model 103 for a Class 1 meter and Model 104 for Class 2 meters. Each calibrator is supplied complete with a certificate of calibration, a full user manual and a battery.