



HD9101
HD9102



CALIBRATORS FOR SOUND LEVEL METERS HD9101 AND HD9102

FIELD OF APPLICATION

The **HD9101** and **HD9102** sound level generator is a battery-fed portable sound source, suitable for calibrating sound level meters (portable and laboratory models) and acoustic measuring stations. It's possible to calibrate directly 1" microphones and, by means of a proper adapter (model 9101040), also 1/2" microphones; the mechanical dimensions are in accordance with standards IEC 61094-4 ("Measurement Microphones, Part 1: Specifications for Laboratory Standard Microphones") and IEC 61094-4 ("Measurement Microphones, Part 4: Specifications for working Standard Microphones").

THE ADVANTAGES OF THE HD 9101/02 CALIBRATOR ARE THE FOLLOWING:

- with the frequency of sound pressure at 1000 Hz, calibration of sound level meters may be carried out with any kind of frequency weighting (LIN, A, B..), without introducing correction factors.
- The generated sound pressure level is independent of atmospheric pressure, so it is not necessary to correct the value to suit the atmospheric pressure.
- The HD 9101 calibrator may be used conveniently in the laboratory and in the field.
- It is simple to use, so it may be used even by non-skilled operators.

TECHNICAL DATA

The calibrator **HD9101** satisfies **Class 1 specifications according to the standard IEC 60942-1988 and comply with the requirements of the standard ANSI S1.40-1984.**

The calibrator **HD9102** satisfies **Class 2 specifications according to the standard IEC 60942-1988 and comply with the requirements of the standard ANSI S1.40-1984.**

- Diameter of microphones that may be calibrated:
23.77 ± 0.05 mm 1"
12.7 ± 0.03 mm 1/2" (with 1/2" adapter mod. 9101040) standard according to IEC 61094-1 and IEC 61094-4
- Stabilization time: 60 sec
- Frequency HD 9101: 1000Hz ± 2%
- Frequency HD 9102: 1000Hz ± 4%
- Sound pressure level HD 9101: 94dB/114dB ± 0.3dB
- Sound pressure level HD 9102:
94dB/114dB ± 0.5dB
(ref. 101.3kPa, 23°C ± 3°C and 65% RH)
- Total distortion: < 0.5%
- Static pressure influence (Ref. to 101.3kPa):
± 0.1 dB between 90 kPa and 108kPa
± 0.3 dB between 65 kPa and 108kPa
- Temperature influence:
± 0.05 dB between 5°C and 35°C
± 0.2 dB between -10°C and 50°C
- Relative humidity influence (ref. to 50% R.H.)
± 0.1dB between 10% RH and 90% RH
Free from condensation
- Stability (one year, standard use): ± 0.1 dB
- Working temperature: -10°C ÷ +50°C
- Storage temperature: -25°C ÷ +55°C
- Relative humidity: < 90% RH
- Equivalent volume of the calibration room (+23°C):
10 cm³
- Power supply: 9V alkaline battery IEC type 6F22
- Battery life: about 15 hours with an alkaline battery
- Housing made of: NORYL NE110 resin
- Dimensions: 60x140 mm, H=46 mm
- Weight: 400 gr.

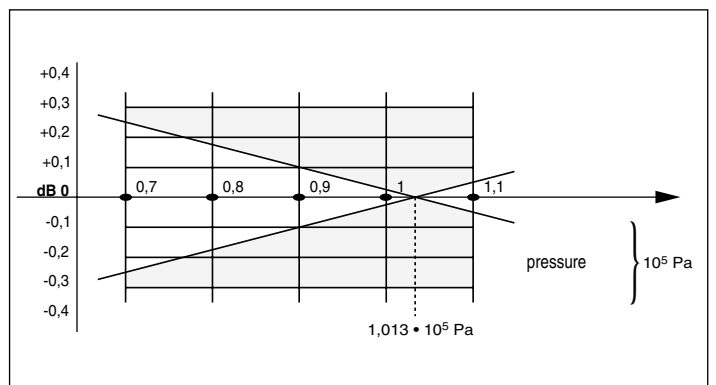
ORDER CODE

HD9101: class 1 calibrator according to IEC60942:1988. Frequency 1000 Hz, sound level 94dB/114dB.

HD9102: class 2 calibrator according to IEC60942:1988. Frequency 1000 Hz, sound level 94dB/114dB.

ACCESSORIES:

- Adapter for 1/2" model 9101040
- 9V alkaline battery IEC 6LF22
- instructions manual



Dependence of sound level on atmospheric pressure.