Audiometer Calibration

Systems

- ***Calibration of supra- and circum-aural and insert earphones***
- ***Free-field calibration and audiometric booth verification***
- ***Modular artificial ear systems according to standards***
- ***Dedicated audiometer calibration analyzer***

TDH-39 Supra-aural earphones mounted on the NBS 9-A / IEC 60318-3 6cc Coupler. This setup is based on a 1" measurement microphone.

HDA-200 Circum-aural earphones mounted on the IEC 60318-2 Ear Simulator (high-frequency coupler). This setup is based on a 1/2" measurement microphone.

EAR 3A Ear-insert mounted on the IEC 60318-5 2cc Coupler. This setup is based on a 1" measurement microphone.

Audiometer Calibration made portable

Audiometer Calibration Systems

The G.R.A.S. Audiometer Calibration Systems are all configured to meet the requirements of modern audiometer calibration. They are easy and fast to setup and control, and can be upgraded as your calibration needs changes. Two standard packages are available and several options can be added depending on the type and features of the audiometer and respective ear-phones connected.

Artificial Ears

The calibration systems are based on G.R.A.S.' modular artificial ears and enables standardized calibration of supra- and circum-aural earphones, ear-inserts and tymphanometers and free-field speakers. This means that only one base is needed and that only the couplers are exchanged. All the ear simulators are combined with IEC 60941 standardized Type 1 measurement microphones and are covered by G.R.A.S.' 5 year warranty program against defective materials and workmanship*.

Audiometer Calibration Analyzer

The lightweight, handheld analyzer simultaneously shows the values for Leq, exact frequency and distortion - all in the same display. It includes a 1/3 octave frequency analyzer for checking the ambient noise of the audiometric test room and free-field calibration. The free-field calibration option includes a free-field microphone, extension cord and tripod in order to move the equipment out of the sound field.

Sound Calibrator

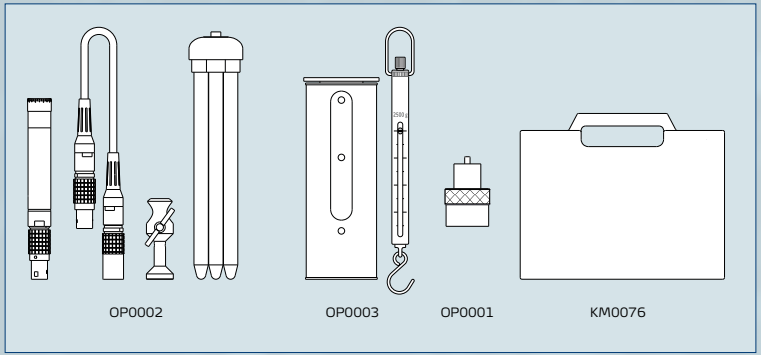
In order to verify the calibration system – artificial ears and analyzer – a reference sound source is efficient. The sound calibrator generates a sound pressure level of 114 dB at 1 kHz and is delivered with the needed adapters for all G.R.A.S.' artificial ear systems. Depending on your quality control system requirements and daily use, G.R.A.S. recommends a traceable or accredited calibration every 12 months for this unit.

** G.R.A.S. microphones can also be repaired should you by mistake damage the diaphragm.*

System Configurations

Two pre-configured G.R.A.S. Sound & Vibration Audiometer Calibration Systems are available. Both systems include artificial ears for TDH-39/49 and HDA-200 and an audiometer calibration analyzer. If you need another, customized solution please find your local G.R.A.S. distributor at gras.dk

Audiometer Calibration Options



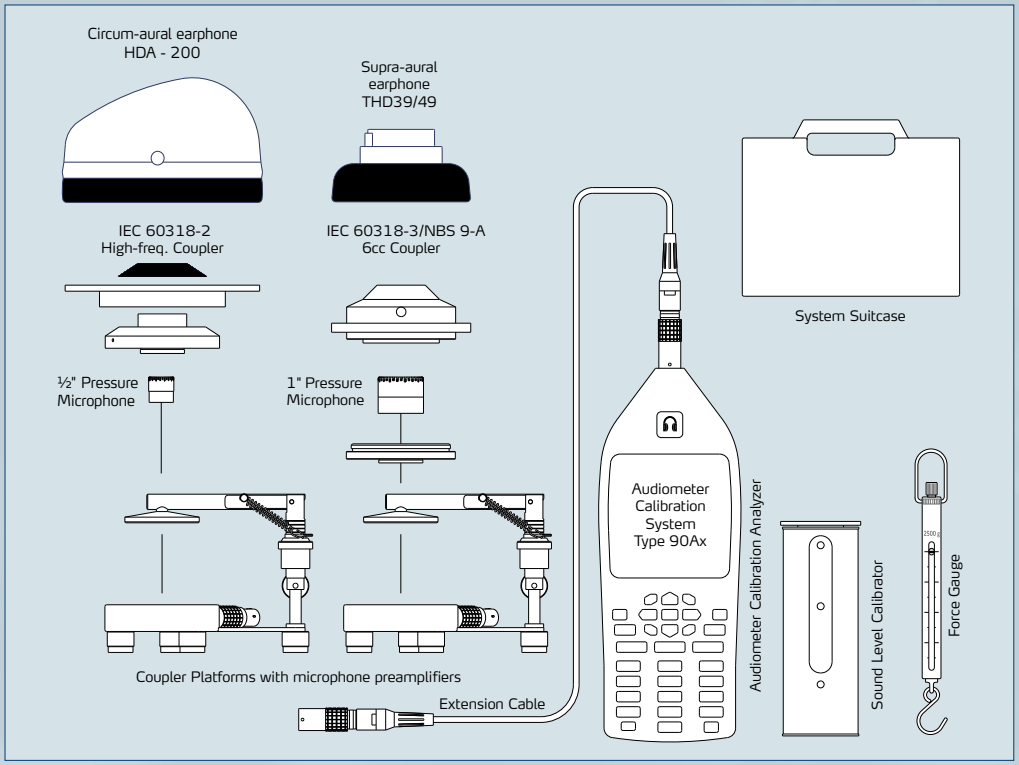
Insert Earphone Option OP0001 (IEC60318-5 2cc Reference Coupler for 1" Microphone)

Free-field Option OP0002 (Free-field microphone, 10 m cable, holder and tripod)

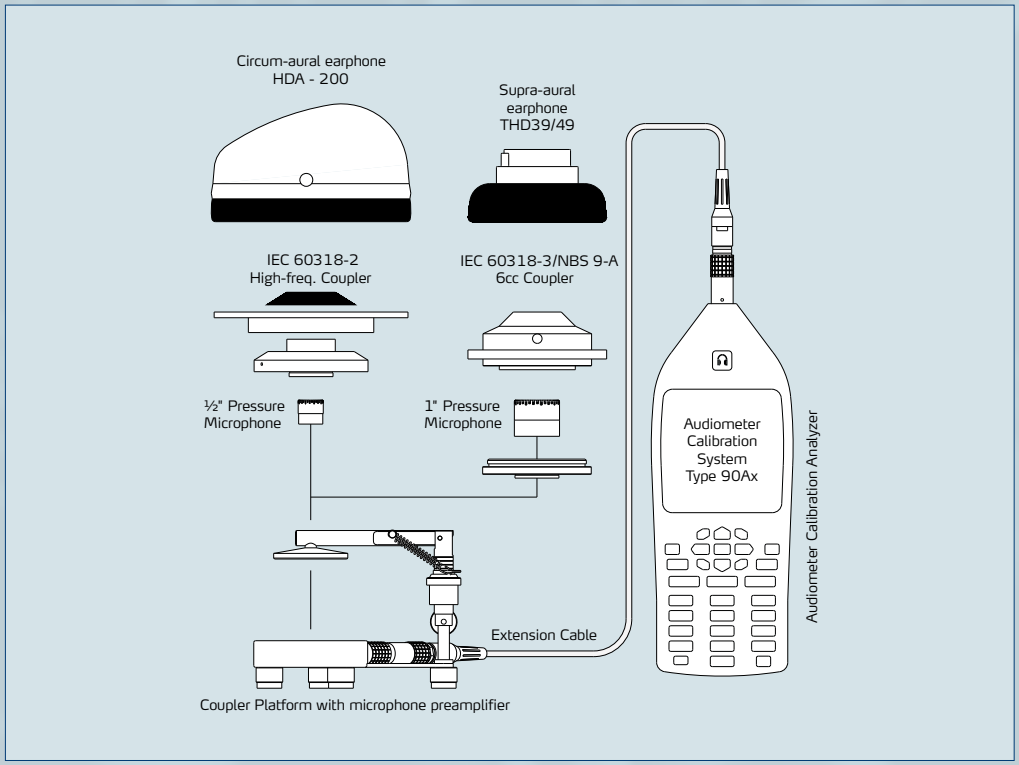
Verification Option OP0003 (Sound calibrator and force gauge)

Audiometer Calibration System Suitcase KM0076

Audiometer Calibration System Type 90AA



Basic Audiometer Calibration System Type 90AB



We Make Microphones

Since the company's beginning in 1994 we have been 100% dedicated to developing and manufacturing high-quality measurement microphones and related acoustic equipment.
G.R.A.S. Sound & Vibration is therefore capable of offering you the right acoustical solutions within the fields of aerospace, automotive, audiology, consumer electronics, noise monitoring, building acoustics, telecommunications and naturally; microphone calibration.

The company is located in Denmark and founded by the Danish acoustics pioneer, Gunnar Rasmussen who for more than half a century has contributed to the world of sound and vibration with his unique ideas and designs.
Mr. Rasmussen's special understanding of acoustics, electronics, metallurgy and physics has during the years lead to many innovations in acoustic instrumentation and measurement techniques.

From the first commercially available series of 1" measurement microphones to intensity probes and techniques, artificial ear simulators and hundreds of customized applications, focus has always been on the users' needs and on the highest possible product quality.

This tradition of aptitude and working excellence is spun off and worked into every solution from G.R.A.S. Sound & Vibration for the benefit and satisfaction of our users.
Our R&D Team is continuously improving our well-known solutions as well as developing new products to meet the industry's demands and the recommendations of various, international standardization boards.

The G.R.A.S. measurement microphone technology has of course been developed over time and we are proud to offer the best customer service available. All our microphones are solely produced in stainless steel and in a quality that allows for a 5 year warranty.

Should you by mistake damage the diaphragm on a G.R.A.S. microphone, our special technique enables repair at very reasonable price. A fact often valued not only by the users but also their purchase departments who are guaranteed a long term investment with equipment from G.R.A.S.

G.R.A.S. is represented worldwide in more than 40 countries by subsidiaries and distributors. Whether you are searching for a multi-channel solution or just a replacement microphone for your sound level meter your local G.R.A.S. distributor will in close corporation with us be able to help solve your measurement needs.

Please visit gras.dk for your local G.R.A.S. distributor.

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