

GRAS 43BB-1

Low-noise Ear Simulator
System



Volume: 1260 mm³ @ 500 Hz
Dyn range: 10.5 dB(A) to 113 dB
Based on IEC 60318-4

The 43BB-1 Low-noise Ear Simulator System is for acoustic low noise measurements on insert headphones, especially headphones with active noise cancellation. It is based on the IEC 60318-4 ear simulator standard.

Introduction

The GRAS 43BB-1 is a low-noise, high-sensitive ear simulator system for measurements of sound pressure levels close to or below the threshold of human hearing.

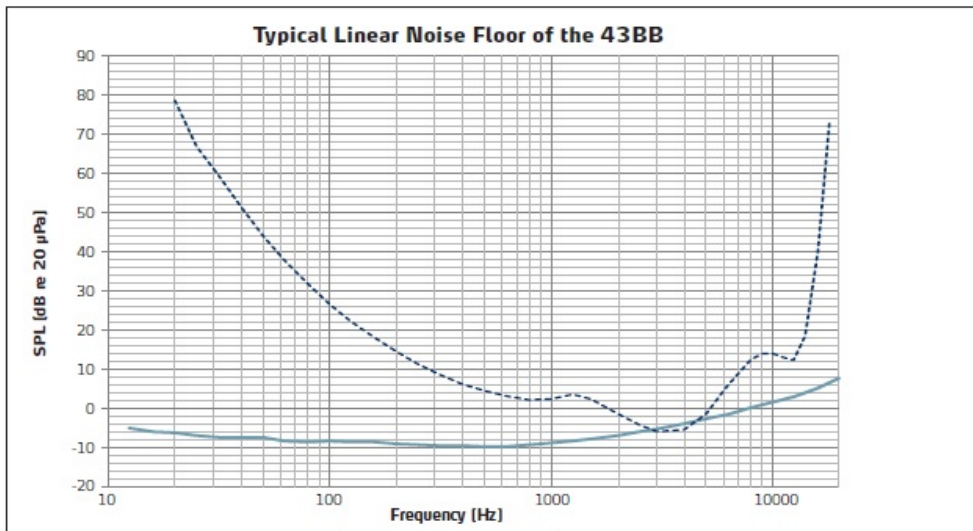
It is identical to the 43BB Low-noise Ear Simulator System except that it uses an angled adapter for the preamplifier, and therefore can be used in binaural setups inside a 45BB KEMAR or a 45BC.

43BB-1 is part of the [45BB-12 KEMAR](#) with Anthropometric Pinna for Low-noise Ear- and Headphone Test 2-Ch LEMO, and [45BC-12 KEMAR](#) with Mouth Simulator and Anthropometric Pinnae for Low-noise Headset Test, 2-Ch LEMO.

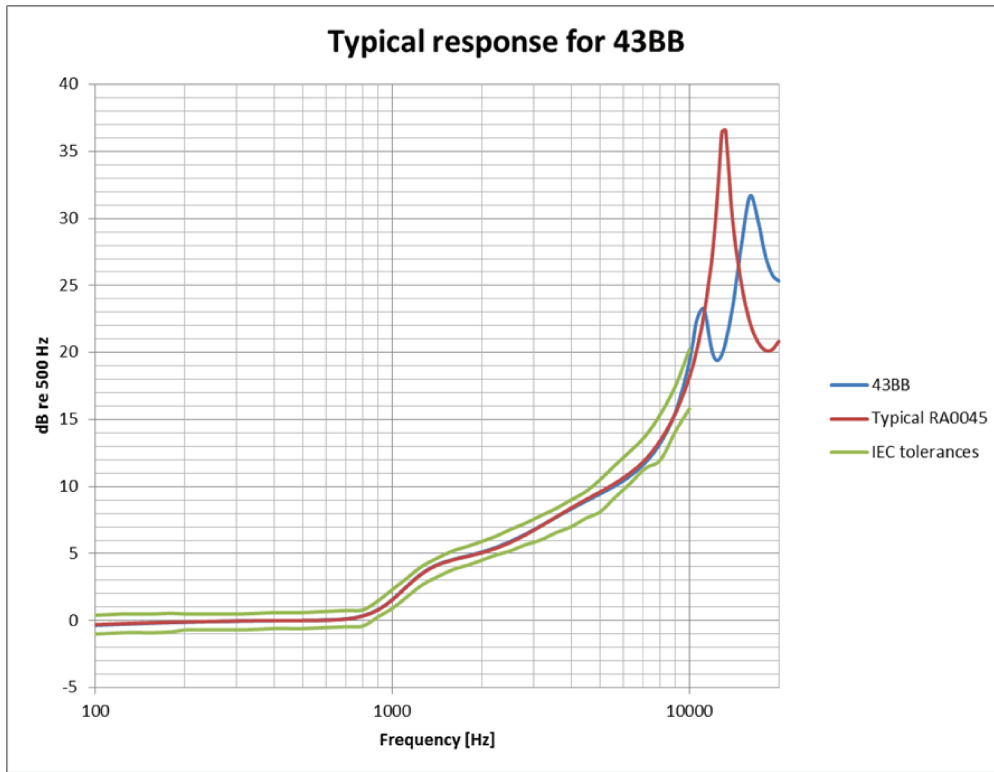
Read about the 43BB [here](#).

Connector type		3 m 7-pin LEMO
Polarization/Connection		0 V / CCP
Theoretical dynamic range lower limit with GRAS preamplifier	dB(A)	10.5
Theoretical dynamic range upper limit with GRAS preamplifier @ +28 V / ±14 V power supply	dB	113
Coupler volume	mm ³	1260 @ 500 Hz
CE/RoHS compliant/WEEE registered		Yes/Yes/Yes

Noise floor and frequency response for 43BB-1 is identical to the 43BB:



The noise floor (solid line) is typically below the threshold of human hearing (dashed line).



The frequency response is very similar to the standard 60318-4 ear simulator up to 10 kHz

GRAS Sound & Vibration reserves the right to change specifications and accessories without notice.

Included Items

GRAS RA0234	Low-noise Ear Simulator
GRAS 40AH	1/2" Ext. Polarized Pressure Microphone, High Sensitivity
GRAS 26HG	1/4" Preampifier with 3 m Integrated Cable
GRAS 26HT	Gain and Filter Unit for 40HT
GRAS 12HF	1-Channel Power Module for Low-noise Systems

Accessories

GRAS 42AA	Pistonphone, Class 1
GRAS 42AP	Intelligent Pistonphone, Class 0
GRAS RA0090	94 dB Pistonphone Coupler
GRAS RA0237	Straight Ear Canal Extension Kit for KEMAR
GRAS RA0172	Pinna Holder Kit
GRAS AA0046	3 m LEMO 7-pin - LEMO 7-pin Cable for Low-noise measuring system
GRAS AA0047	10 m LEMO 7-pin - LEMO 7-pin Cable for Low-noise measuring system
GRAS AA0053-CL	Customized length LEMO 7-pin - LEMO 7-pin Cable for Low-noise measuring system. CLXXXX= Cable length in centimeters to be specified by customer

GRAS Sound & Vibration reserves the right to change accessories and specifications without notice.

GRAS Worldwide

Subsidiaries and distributors in more
than 40 countries

HEAD OFFICE, DENMARK
GRAS SOUND & VIBRATION
Skovlytoften 33
2840 Holte
Denmark
Tel: +45 4566 4046
www.gras.dk
gras@gras.dk

USA
GRAS SOUND & VIBRATION
5750 S.W. Arctic Drive
Beaverton, OR 97005
Tel: 503-627-0832
Toll Free: 800-231-7350
www.gras.us
sales@gras.us

CHINA
GRAS SOUND & VIBRATION
Room 303, Building T6
Hongqiaohui, 990, Shenchang Road
Minhang District, Shanghai
China, 201106
Tel: +86 21 64203370
www.gras.com.cn
cnsales@gras.dk



ABOUT GRAS SOUND & VIBRATION

GRAS is a worldwide leader in the sound and vibration industry. We develop and manufacture state-of-the-art measurement microphones to industries where acoustic measuring accuracy and repeatability is of utmost importance in R&D, QA and production. This includes applications and solutions for customers within the fields of aerospace, automotive, audiology, and consumer electronics. GRAS microphones are designed to live up to the high quality, durability and accuracy that our customers have come to expect and trust.

GRAS Sound
& Vibration