

# GRAS 43AC

Ear Simulator Kit According to  
IEC 60318-4



Connection: 200 V/LEMO  
Volume: 1260 @ 500 Hz  
Dyn range: 25 dB(A) to 164 dB  
ANSI: S3.7  
IEC: 60318-4

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The GRAS 43AC Ear Simulator Kit is a complete test-jig for acoustical measurements on earphones coupled to the ear by inserts such as tubes and ear moulds.

The GRAS 43AC Ear Simulator Kit is a complete test jig for acoustically testing earphones coupled to the ear via inserts such as tubes and ear moulds and complies with the following international requirements:

- IEC 60318-4: Occluded-ear simulator for the measurement of earphones coupled to the ear by ear inserts.

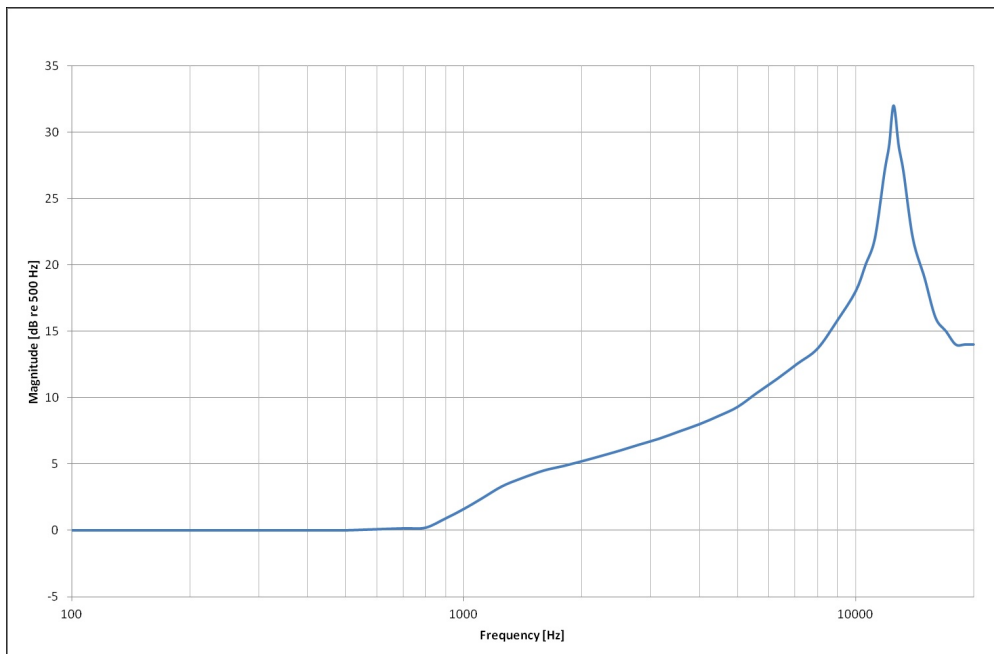
The 43AC comprises:

- [GRAS RA0045](#) Ear Simulator
- [GRAS 40AG](#) 1/2" Pressure Microphone
- GRAS 26AC 1/4" Preamplifier
- [GRAS RA0001](#) Right-angled Adapter
- [GRAS RA0052 Test Jig](#)

The Test Jig has an adjustable spring-loaded arm to exert a variable force on the test object.

A prepolarized version is available, [GRAS 43AC-S1](#).

Theoretical dynamic range lower limit with GRAS preamplifier	dB(A)	25
Theoretical dynamic range upper limit with GRAS preamplifier @ +28 V / ±14 V power supply	dB	153
Theoretical dynamic range upper limit with GRAS preamplifier @ +120 V / ±60 V power supply	dB	164
Set sensitivity @ 250 Hz (±2 dB)	mV/Pa	12
Set sensitivity @ 250 Hz (±2 dB)	dB re 1V/Pa	-38.5
Coupler volume	mm <sup>3</sup>	1260 @ 500 Hz
Resonance frequency	kHz	13.5
Temperature range, operation	°C / °F	-30 to 60 / -22 to 140
Temperature coefficient @250 Hz	dB/°C / dB/°F	-0.01 / -0.006
Humidity range non condensing	% RH	0 to 75
ANSI standard		S3.7
IEC standard		60318-4 (former 60711)
CE/RoHS compliant/WEEE registered		Yes/Yes/Yes
Connector type		3 m 7-pin LEMO
Weight	g / oz	1550 / 54.675



Typical frequency response for RA0045

## Included

<a href="#">GRAS RA0045</a>	IEC 60711 Ear Simulator with microphone included
GRAS 26AC	¼" Preamplifier
<a href="#">GRAS RA0052</a>	Test Jig
GRAS GR0435	In-ear Adapter
GRAS GR0436	Tube stud
GRAS GR0437	Ear-mould Simulator
GRAS GR0438	Union nut
GRAS GR0440	Tube stud
GRAS GR0433	Calibration Adapter
GRAS GR0434	Stop Washer

## Optional

<a href="#">GRAS 12AK</a>	Power Module
<a href="#">GRAS 42AA</a>	Pistonphone
<a href="#">GRAS RA0196</a>	High-tension springs (set of two)

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

# GRAS Worldwide

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than 40 countries

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## 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