

# GRAS 43AC-S6

Hi-Res Ear Simulator Kit LEMO



Freq range: 100 Hz to 50 kHz  
Dyn range: 44 dB(A) to 166 dB  
Sensitivity: 1.6 mV/Pa  
Use: For general acoustic diagnostics

The GRAS 43AC-S6 Ear Simulator Kit is a complete test-jig for hi-res measurements up to 50 kHz on earphones coupled to the ear by inserts such as tubes and earmoulds.

The GRAS 43AC-S6 Ear Simulator Kit is a complete test jig for acoustically testing earphones coupled to the ear via inserts such as tubes and ear moulds. It is compatible with the following international requirements:

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

43AC-S6 uses the RA0403 Hi-Res Ear Simulator which extends the useful frequency range to 50 kHz. Read more about the RA0403 [here](#).

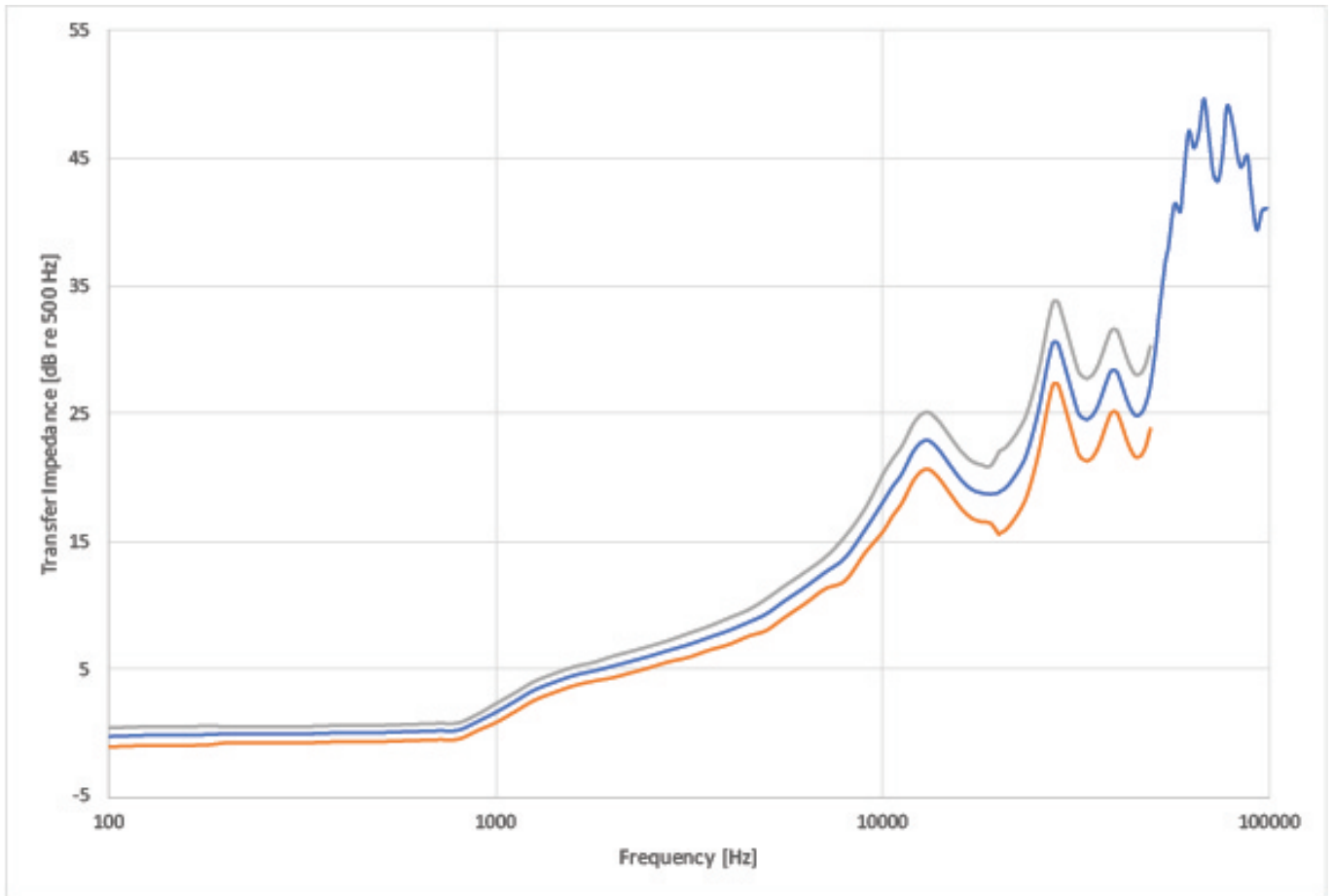
The 43AC comprises:

- [GRAS RA0403](#) Externally Polarized Hi-Res Ear Simulator
- [GRAS 40BP](#) 1/4" Pressure Microphone (included in RA0403)
- 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-S7](#).

Theoretical dynamic range lower limit with GRAS preamplifier	dB(A)	44
Theoretical dynamic range upper limit with GRAS preamplifier @ +120 V / $\pm 60$ V power supply	dB	169
Set sensitivity @ 250 Hz ( $\pm 3$ dB)	mV/Pa	1.6
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



*Fig 1. The transfer impedance of a typical RA0403 Hi-Res Ear Simulator with tolerances. Up to 10 kHz, the response is within the limits defined by IEC 60318-4. Above 10 kHz, the response is within a fairly tight tolerance band up to 50 kHz*

## Included

GRAS RA0403	Hi-Res Ear Simulator, (ext. polarized)
GRAS 26AC	¼" Preamplifier
GRAS RA0001	Right Angled Adapter
<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
GRAS MI0070	Cord 0.2 m

## Optional

<a href="#">GRAS 12AK</a>	Power Module
<a href="#">GRAS 42AA</a>	Pistonphone

## Miscellaneous

<a href="#">GRAS RA0196</a>	High-tension springs (set of two)
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GRAS Sound & Vibration reserves the right to change specifications and accessories without notice.

# GRAS Worldwide

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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 and related equipment for industries where acoustic measuring accuracy and repeatability are of the utmost importance. This includes applications and solutions for customers within the fields of aerospace, automotive, audiology, consumer electronics and other highly demanding industries. GRAS microphones are designed to live up to the high quality, durability and accuracy that our customers have come to expect, trust and require.

GRAS Sound & Vibration is represented through subsidiaries and distributors in more than 40 countries and is part of Axiometrix Solutions, a leading test solutions provider comprised of globally recognized measurement brands. Read more at [www.grasacoustics.com](http://www.grasacoustics.com)

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