GRAS 43AC-S4

High-Frequency Ear Simulator Kit LEMO



Freq range: 3.15 Hz to 20 kHz
Dyn range: 25 dB(A) to 138 dB
Sensitivity: 50 mV/Pa
Use: For general acoustic diagnostics

The GRAS 43AC-S4 Ear Simulator Kit is a complete test-jig for high-frequency acoustical measurements up to 20 kHz on earphones coupled to the ear by inserts such as tubes and ear moulds.

GRAS Sound & Vibration
Skovlytoften 33, 2840 Holte, Denmark
www.grasacoustics.com

The GRAS 43AC-S4 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.

43AC-S4 uses the RA0401 High-Frequency Ear Simulator which extends the useful frequency range to 20 kHz. Read more abot the RA0401 here.

The 43AC comprises:

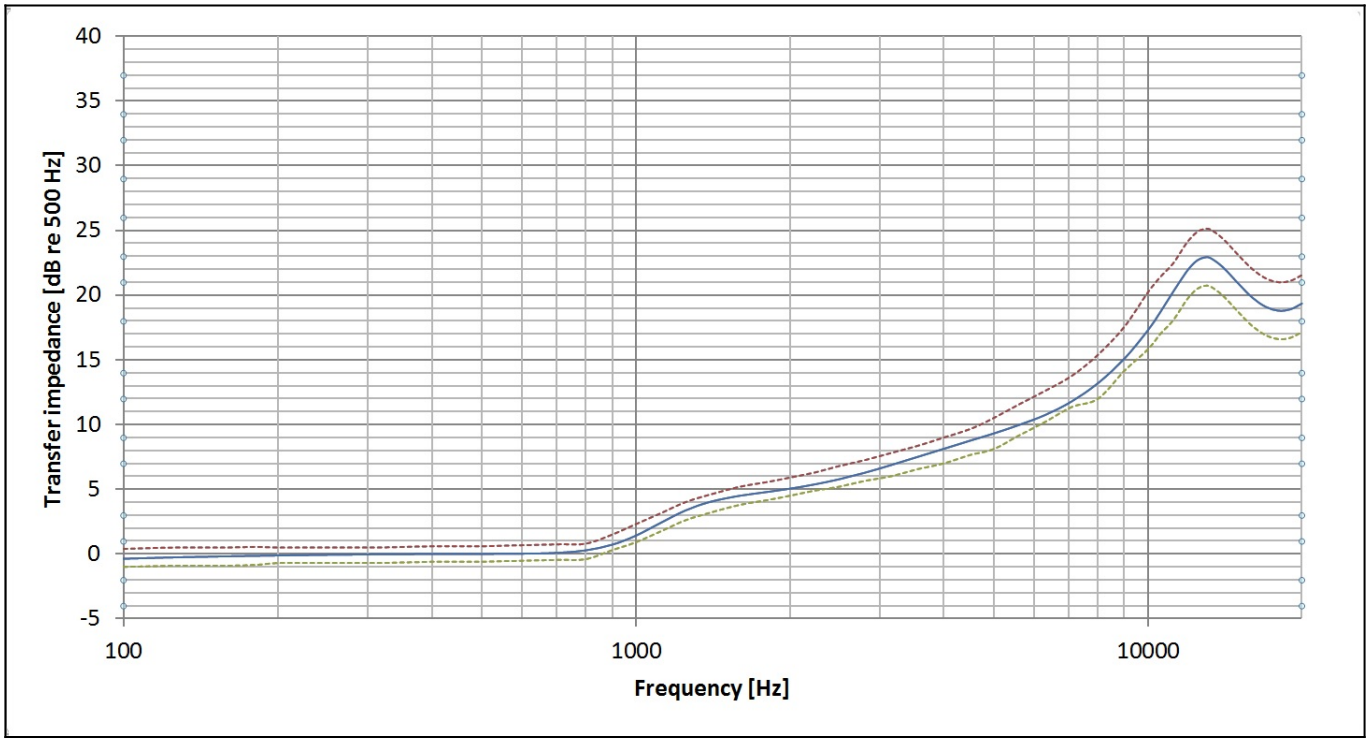
- GRAS RA0401 Externally Polarized High-Frequency Ear Simulator
- GRAS 40AG 1/2" Pressure Microphone (included in RA0401)
- GRAS 26AC 1/4" Preamplifier
- GRAS RA0001 Right-angled Adapter
- GRAS RA0052 Test Jig

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-S5.

Specifications

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^3	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 RA0401

Included

GRAS RA0401	High-Frequency Ear Simulator, including 40AG microphone (ext. polarized)
GRAS 26AC	¼" Preamplifier
GRAS RA0001	Right Angled Adapter
GRAS RA0052	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

GRAS 12AK	Power Module
GRAS 42AA	Pistonphone

Miscellaneous

GRAS RA0196	High-tension springs (set of two)

GRAS Sound & Vibration reserves the right to change specifications and accessories 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.GRASacoustics.com
gras@grasacoustics.com

USA
GRAS SOUND & VIBRATION
9290 SW Nimbus Avenue
Beaverton, OR 97008
Tel: 503-627-0832
Toll Free: 800-231-7350
www.GRASacoustics.com
sales-usa@grasacoustics.com

UK
GRAS SOUND & VIBRATION
Unit 115, Gibson House,
Ermine Business Park, Huntingdon,
Cambridgeshire, PE29 6XU
Tel: +44 (0) 7762 584 202
www.GRASacoustics.com
sales-uk@grasacoustics.com

CHINA
GRAS SOUND & VIBRATION
Room 315, RuiBo Center(T1)
Lane683, Shenhong Rd,
Minhang District,
Shanghai, China, 201107
Tel: +86 21 64203370
www.GRASacoustics.cn
cnsales@grasacoustics.com



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

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