

GRAS 43AA

Ear Simulator Kit According to IEC 60318-1 & -2



Connection: 200 V/LEMO

Volume: Complex

Dyn range: 25 dB(A) to 164 dB

ANSI: S3.7

IEC: 60318-1 & -2

The GRAS 43AA Ear Simulator Kit is a complete test jig for acoustical measurements on telephone handsets and earphones. It includes an IEC 60318 Ear Simulator RA0039 which is individually calibrated according to the ITU-T Recommendation P.57 (08/96) "Series P: Telephone transmission quality, objective measuring apparatus: artificial ears."

The GRAS 43AA is a complete test jig for acoustical measurements on telephone handsets and earphones in accordance with:

- IEC60318-1 & -2 Electroacoustics – Simulators of human head and ear – Part 1: Ear simulator for the calibration of supraaural earphones, 1998-07
- ITU-T Recommendation P.57 (08/96) Series P: Telephone transmission Quality, Objective measuring apparatus: Artificial Ears

It consists of the following components:

- IEC 60318-1 & -2 [GRAS RA0039 Ear Simulator](#)
- [GRAS 40AG ½" Pressure Microphone](#)
- GRAS 26AC ¼" Preamplifier
- [GRAS RA0052 Test Jig](#)
- Mounting plates for circum-aural and supra-aural headphones

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

A prepolarized version is available, [GRAS 43AA-S2](#).

A version with a [GRAS 26AB](#). Preamplifier is available, [GRAS 43AA-S3](#).

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
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 80
ANSI standard		S3.7
ITU-T recommendations		P.57 Type 1
CE/RoHS compliant/WEEE registered		Yes/Yes, Yes
Connector type		3 m 7-pin LEMO
Weight	g / oz	1.65 / 58.202

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

Included

GRAS RA0039	IEC 318 Ear Simulator
GRAS 40AG	½" Pressure Microphone, Wide Frequency
GRAS 26AC	¼" Preamplifier
GRAS RA0052	Test Jig
GRAS GR0339	Circum-aural plate

Optional

GRAS 12AK	Power Module
GRAS 42AA	Pistonphone - calibration source

Miscellaneous

GRAS RA0196	High-tension springs (set of two)
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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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