

# GRAS 43AA-S3

Ear Simulator Kit incl. 26AB preamplifier



Connection: 200 V/LEMO  
Volume: Complex  
Dyn range: 25 dB(A) to 164 dB  
ANSI: S3.7 IEC: 60318-1 & -2

The GRAS 43AA-S3 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-S3 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 26AB 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](#).

An externally polarized version with a [GRAS 26AC-1 ¼](#) preamplifier is available, [GRAS 43AA](#).

Theoretical dynamic range lower limit with GRAS preamplifier	dB(A)	25
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.

## 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](http://www.grasacoustics.com)  
[gras@grasacoustics.com](mailto:gras@grasacoustics.com)

## USA GRAS SOUND & VIBRATION

5750 S.W. Arctic Drive  
Beaverton, OR 97005  
Tel: 503-627-0832  
Toll Free: 800-231-7350  
[www.grasacoustics.com](http://www.grasacoustics.com)  
[sales-usa@grasacoustics.com](mailto:sales-usa@grasacoustics.com)

## 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](http://www.gras.com.cn)  
[cnsales@grasacoustics.com](mailto: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 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