

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

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.
- ITU-T Recommendations P.57 (08/96) Series P: Telephone transmission quality, Objective measuring apparatus: Artificial ears.

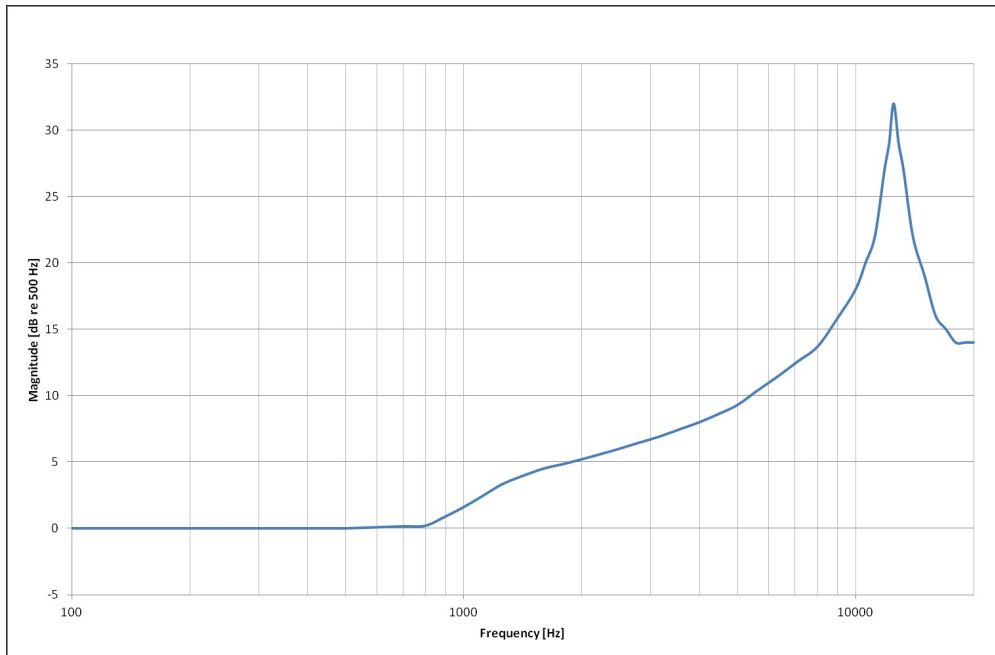
The 43AC comprises:

- [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 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)
ITU-T recommendations		P.57 Type 2
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

GRAS RA0045	IEC 60711 Ear Simulator with microphone included
GRAS 26AC	¼" Preamplifier
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

Optional

GRAS 12AK	Power Module
GRAS 42AA	Pistonphone
GRAS RA0196	High-tension springs (set of two)

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

| We Make Microphones

Tradition

Since the establishment in 1994, GRAS has been 100% dedicated to developing and manufacturing high-quality measurement microphones and related acoustic equipment.

Innovation

We work with everybody with an interest in sound or noise within the fields of aerospace, automotive, audiology, consumer electronics, noise monitoring, building acoustics and telecommunications.

Quality

At GRAS we know that in order for you to trust your measurement results; signal quality, stability and robustness are essentials. We design and build them to perform under real life conditions – and beyond.

