

GRAS 43AD

Ear Simulator Kit According to ITU-T Rec. P57 Type 1



Connection: 200 V/LEMO

Volume: Complex

Dyn range: 25 dB(A) to 164 dB

ANSI S3.7

IEC: 60318-1

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

The GRAS 43AD Artificial Ear is a complete assembly for acoustical measurements on acoustical transmitters and loudspeakers. It can be integrated with a telephone test head or permanently installed on a production test line.



The GRAS 43AD is a complete assembly for acoustical measurements on acoustical transmitters and loudspeakers in accordance with:

- IEC 60318-1 & -2 Electroacoustics – Simulators of human head and ear – Part 1: Ear simulator for the calibration of supra-aural earphones, 1998-07
- ITU-T Recommendation P.57 (08/96) Series P: Telephone transmission quality, Objective measuring apparatus: Artificial ears.

It can be integrated with a telephone test head or permanently installed on a production test line.

The 43AD comprises:

- IEC 318 [GRAS RA0039 Ear Simulator](#)
- [GRAS 40AG ½" Pressure Microphone](#)
- [GRAS 26AK ¼" Preamplifier](#)
- Snap coupling GR0332 and RA0523
- Mounting plates for circum-aural and supra-aural headphones

A prepolarized version is available, [GRAS 43AD-S1](#).

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
IEC standard		60318-1 (former 60318)
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 26AK	½" Preamplifier
GRAS AA0008	3 m Extension Cable
GR0332	Snap Coupling (female)
GR0336	Snap Coupling (male)
GR0339	for testing earphones fitted with fluid cushions

Optional

GRAS 12AK	Power Module
GRAS 42AA	Pistonphone

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

grasacoustics.com

GRAS
An Axiometrix Solutions Brand