# GRAS 43AD-S1

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



Μ.

Connection: 0 V/CCP Volume: Complex Dyn range: 25 dB(A) to 150 dB ANSI: S3.7 IEC: 60318-1 The GRAS 43AD-S1 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.

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





The GRAS 43AD-S1 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-S1 comprises:

- IEC 60318 <u>GRAS RA0039 Ear Simulator</u>
- <u>GRAS 40A0 ½" Pressure Microphone</u>
- GRAS 26CA ¼" Preamplifier
- Snap coupling GR0332 and RA0523
- Mounting plates for circum-aural and supra-aural headphones

An externally polarized version is available, <u>GRAS</u> <u>43AD.</u>



## 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	150
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 recommondations		Р.57 Туре 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.

## Ordering Info

### Included

<u>GRAS RA0039</u>	IEC 318 Ear Simulator
<u>GRAS 40AG</u>	½" Pressure Microphone, Wide Frequency
GRAS 26AK	½" Preamplifier
GRAS AA0034	3 m Extension Cable
GR0332	Snap Coupling (female)
GR0336	Snap Coupling (male)
GR0339	for testing earphones fitted with fluid cushions

### Optional

<u>GRAS 12AK</u>	Power Module
GRAS 42AA	Pistonphone

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## **GRAS Worldwide**

Subsidiaries and distributors in more than 40 countries

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### **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.

