

# GRAS 43AI

CCP Ear Simulator for Production Testing Based on ITU-T  
Rec. P57 Type 3.2 High-leak



Connection: 0 V/CCP  
Volume: Complex  
Dyn range: 25 dB(A) to 150 dB  
ANSI: S3.7

The GRAS 43AI ear simulator with TEDS consists of the ITU-T Rec. P.57 Type 2 Ear Simulator and Type 3.2 Simplified High-leak Pinna Simulator and is designed for making ITU-T standardized tests of telephone handsets, receivers and receiver/loudspeaker-modules on the production line.

43AI consists of the ITU-T Rec. P57 Type 2 Ear Simulator and Type 3.2 Simplified High-leak Pinna Simulator for testing leak tolerant receivers

Besides the ear and pinna simulators, GRAS 43AI includes a detachable front-plate that can be machined to make well-defined testing on various receiver related items. A calibration adapter to be used with [GRAS 42AA Pistonphone](#)/[GRAS 42AP Pistonphone](#) is included.

## **TEDS Compatibility**

43AI is IEEE 1451.4 TEDS v. 1.0 compliant. If your measurement platform supports Transducer Electronic Data Sheets (TEDS), you will be able to read and write data like properties and calibration data.

Theoretical dynamic range lower limit with GRAS preamplifier	dB(A)	25
Theoretical dynamic range upper limit with GRAS CCP preamplifier	dB	150
Set sensitivity @ 250 Hz (±2 dB)	mV/Pa	12
Set sensitivity @ 250 Hz (±2 dB)	dB re 1V/Pa	-38.5
Coupler volume	mm <sup>3</sup>	1260 @ 500 Hz
Resonance frequency	kHz	1.570
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 recommondations		P.57
CE/RoHS compliant/WEEE registered		Yes/Yes/Yes
Connector type		Microdot 10/32
Weight	g / oz	0.8 / 28.219

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

## Included

<a href="#">GRAS RA0045-S1</a>	Prepolarized Ear Simulator According to IEC 60318-4 (60711)
<a href="#">GRAS 26CB</a>	¼" CCP Preamplifier
RS0010	Generic Adapter Ring
RA0119	Pistonphone Adapter

## Optional

<a href="#">GRAS AA0070</a>	3 m Microdot - BNC cable
-----------------------------	--------------------------

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**  
9290 SW Nimbus Avenue  
Beaverton, OR 97008  
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)

**UK**  
**GRAS SOUND & VIBRATION**  
Unit 115, Gibson House,  
Ermine Business Park, Huntingdon,  
Cambridgeshire, PE29 6XU  
Tel: +44 (0) 7762 584 202  
[www.GRASacoustics.com](http://www.GRASacoustics.com)  
[sales-uk@grasacoustics.com](mailto: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](http://www.GRASacoustics.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 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](http://www.grasacoustics.com)

[grasacoustics.com](http://grasacoustics.com)

**GRAS**  
An Axiometrix Solutions Brand