

# GRAS 43AH

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



Connection: 0 V/CCP  
Volume: Complex  
Dyn range: 25 dB(A) to 150 dB  
ANSI: S3.7  
IEC: 60318-1 & -2

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

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Besides the ear and pinna simulators, GRAS 43AH 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.

43AH can also be delivered with customized front plates that will enable leakage-controlled testing according to your specific needs.

## **TEDS Compatibility**

43AH 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 ( $\pm 2$ dB)                           | mV/Pa           | 12                     |
| Set sensitivity @ 250 Hz ( $\pm 2$ dB)                           | dB re 1V/Pa     | -38.5                  |
| Coupler volume   | mm <sup>3</sup> | 1260 @ 500 Hz          |
| Resonance frequency  | kHz             | 0.713                  |
| 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          | 0.8 / 28.219           |

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

## Included

|                                |                                  |
|--------------------------------|----------------------------------|
| <a href="#">GRAS RA0045-S1</a> | IEC 60711 Ear Simulator, Prepol. |
| <a href="#">GRAS 26CB</a>      | ¼" CCP Preamplifier              |
| RS0010                         | Generic Adapter Ring             |
| RA0119                         | Pistonphone Adapter              |

## Miscellaneous

|                             |                                   |
|-----------------------------|-----------------------------------|
| <a href="#">GRAS RA0196</a> | High-tension springs (set of two) |
|-----------------------------|-----------------------------------|

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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.

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)

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