

GRAS 43AC-S5

High-Frequency Ear Simulator Kit CCP



Connection: 0 V/CCP

Volume: 1260 @ 500 Hz

Dyn range: 25 dB(A) to 153 dB

ANSI: S3.7

IEC: 60318-4

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The GRAS 43AC-S5 Ear Simulator Kit with TEDS is a complete test-jig for high-frequency measurements up to 20 kHz on earphones coupled to the ear by inserts such as tubes and ear moulds.



The GRAS 43AC-S5 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.

43AC-S5 uses the RA0402 High Resolution Ear Simulator which extends the useful frequency range to 20 kHz. Read more about the RA0402 [here](#).

The 43AC-S5 comprises:

- [GRAS RA0402](#) Prepolarized High Resolution Ear Simulator
- [GRAS 40AO](#) 1/2" Pressure Microphone (included in RA0402)
- [GRAS 26CB](#) 1/4" Preamplifier
- [GRAS RA0001](#) Right-angled Adapter
- [GRAS RA0052](#) Test Jig

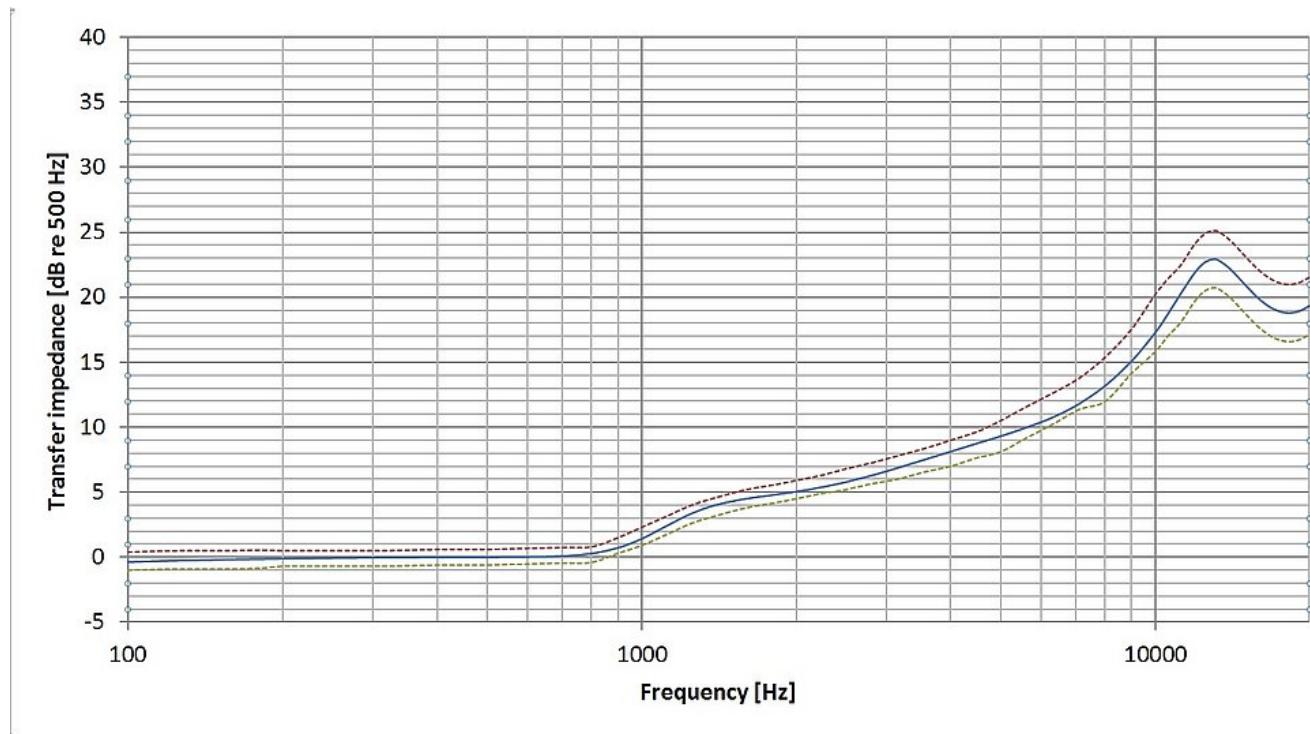
The Test Jig has an adjustable spring-loaded arm to exert a variable force on the test object.

An externally polarized version is available, [GRAS 43AC-S4](#).

TEDS Compatibility

43AC-S5 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 preamplifier @ +28 V / ±14 V power supply | dB | 153 |
| 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) |
| CE/RoHS compliant/WEEE registered | | Yes/Yes/Yes |
| Connector type | | Microdot 10/32 |
| Weight | g / oz | 1550 / 54.675 |



Typical frequency response for RA0402

Included

| | |
|-----------------------------|--|
| GRAS RA0402 | High Resolution Ear Simulator, including 40AO pressure microphone (prepolarized) |
| GRAS 26CB | ¼" Preamplifier |
| GRAS RA0001 | Right Angled Adapter |
| 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 |
| GRAS MI0070 | Cord 0.2 m |

Optional

| | |
|---------------------------|--------------|
| GRAS 12AK | Power Module |
| GRAS 42AA | Pistonphone |

Miscellaneous

| | |
|-----------------------------|-----------------------------------|
| GRAS RA0196 | High-tension springs (set of two) |
|-----------------------------|-----------------------------------|

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

GRAS Worldwide

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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 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

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