# GRAS 43AA-S2

CCP Ear Simulator Kit According to IEC 60318-1 & -2





Connection: 0 V/CCP Volume: Complex

Dyn range: 25 dB(A) to 150 dB

ANSI: S3.7

IEC: 60318-1 & -2

The GRAS 43AA-S2 CCP Ear Simulator Kit with TEDSis a complete test jig for acoustical measurements on telephone handsets and earphones. It includes an IEC 60318 Ear Simulator RA0039 which is individually calibrated according to the ITU-T Recommendation P.57 (08/96) "Series P: Telephone transmission quality, objective measuring apparatus: artificial ears.



## Technology

The GRAS 43AA-S2 CCP Ear Simulator Kit according to IEC 60318-1 & -2 is a complete test jig for acoustical measurements on telephone handsets and earphones in accordance with:

- IEC60318-1 & -2 Electroacoustics Simulators of human head and ear – Part 1: Ear simulator for the calibration of supraaural earphones, 1998-07
- ITU-T Recommendation P.57 (08/96) Series P: Telephone transmission Quality, Objective measuring apparatus: Artificial Ears

It consists of the following components:

- IEC 60318-1 & -2 GRAS RA0039 Ear Simulator
- GRAS 40A0 ½" Pressure Microphone
- GRAS 26CB ¼" Preamplifier
- GRAS RA0052 Test Jig
- Mounting plates for circum-aural and supra-aural headphones

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

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

A version with a <u>GRAS 26AB</u>. Preamplifier is available, <u>GRAS 43AA-S3</u>.

## **TEDS Compatibility**

43AA-S2 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.



## Specifications

| 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 (±3 dB)                                 | mV/Pa         | 12                      |
| Set sensitivity @ 250 Hz (±3 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                    |
| ITU-T recommondations  |               | P.57 Type 1             |
| CE/RoHS compliant/WEEE registered                                |               | Yes/Yes/Yes             |
| Connector type   |               | BNC                     |
| Weight   | g / oz        | 1.65 / 58.202           |

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



### **Included items**

GRAS AA0070

3 m Microdot - BNC Cable

### **Optional items**

GRAS RA0196

Retrofit High-tension Spring Kit for RA0052 (for previous versions (before summer 2014))

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## **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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