GRAS 44AA

Mouth Simulator according to ITU-T Rec. P51 with built-in power amplifier





ITU-T rec.: P.51 Special feature: Built-in power amplifier GRAS 44AA Mouth Simulator is a sound source that simulates the sound field around the human mouth at close quarters and complies with the Standards IEEE 269, 661 and ITU-T Rec. P51.

GRAS 44AA is for testing telephone mouthpieces as well as other microphones similarly used in communication networks.



GRAS 44AA and 44AA-1

At the mouth reference point (MRP), which is 25 mm from the detachable lip ring (35 mm from the mouth of the GRAS 44AA/AA-1), the maximum continuous signal it can produce in ½-octave bands is 100 dB re. 20 µPa in the frequency range of 100 Hz to 16 kHz. Its loudspeaker accepts an external signal either directly or via its own built-in power amplifier (when power is applied). The box includes an AC mains to 24 VDC power supply to power the built-in amplifier inside the 44AA and 44AA-1.

Jigs are included for calibration according to CCITT P.51 and IEEE 269. These are for use with $\frac{1}{4}$ or $\frac{1}{2}$ microphones. One jig holds the microphone at 0° incidence ($\frac{1}{4}$ only) to the sound source, the other at 90° incidence ($\frac{1}{4}$ or $\frac{1}{2}$).

44AA-1 and is a special version of 44AA with the BNC connector positioned on the opposite side for proper mounting on the GRAS 45CC Test Fixture.

NOTE: This type of mouth simulator can not be mounted inside a KEMAR head.



Specifications

GRAS 44AA Mouth Simulator according to ITU-T Rec. P51 with built-in power amplifier

ITU-T recommondations		P.51
Connector type		BNC
IEEE standard		269, 661
Input impedance	kΩ	20
Maximum power, continuous	W	10
Maximum power, pulsed 2 sec.	W	50
Temperature range, operation	°C / °F	10 to 35 / 50 to 95
Gain	dB	10
Input signal, max.	Vrms	2
CE/RoHS compliant/WEEE registered		Yes/Yes/Yes
Weight	g / oz	2900 / 102.29

Built-in power amplifier

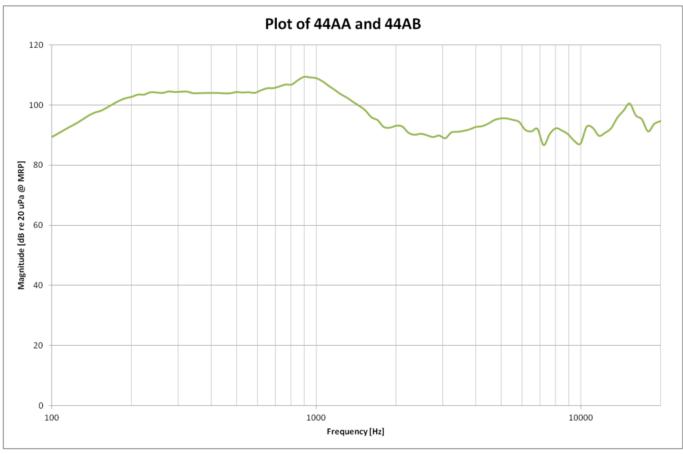
Maximum continuous output level at MRP [200 Hz - 6 kHz] 110 dB re. 20 Pa

Maximum continuous output level at MRP [100 Hz - 16 kHz] 100 dB re. 20 Pa

Distortion 250 Hz - 8 kHz (Linear signal @ 94 dB at MRP) typically 1 %, max. 1.5 %



Specifications



Frequency response

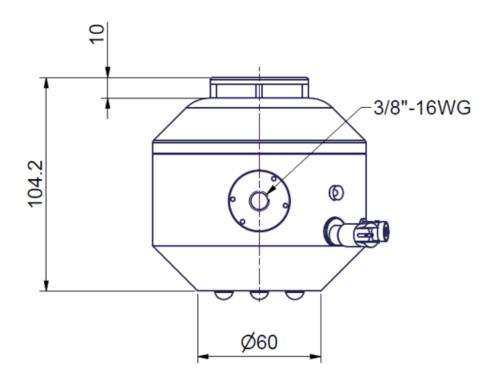
GRAS Sound & Vibration reserves the right to change specifications and accessories without notice.

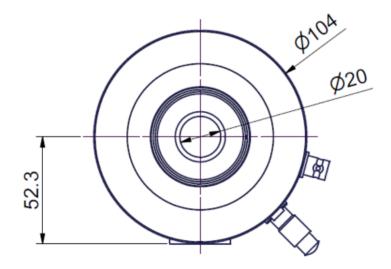


built-in power amplifier

44AA





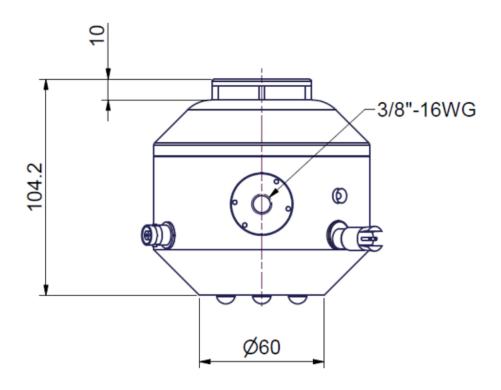


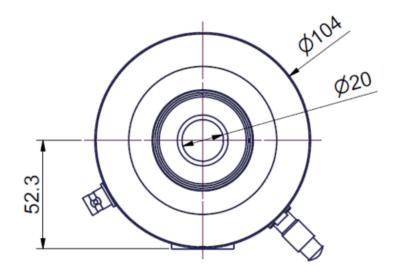




44AA-1









Ordering info

Included

GRAS RA0104	Jig (CCITT P51)
GRAS RA0105	Jig (IEEE 269)
AB0012	24 VDC Power supply

Optional

GRAS RA0110	Conical mouthpiece

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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 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 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 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 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

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