

# 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 which 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.

At the mouth reference point (MRP), which is 25mm from the detachable lip ring (35mm from the mouth of the GRAS 44AA), the maximum continuous signal it can produce in 1/3-octave bands is 100dB re. 20 $\mu$ Pa in the frequency range 100Hz to 16kHz. Its loudspeaker accepts an external signal either directly or via its own built-in power amplifier (when power is applied).

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

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

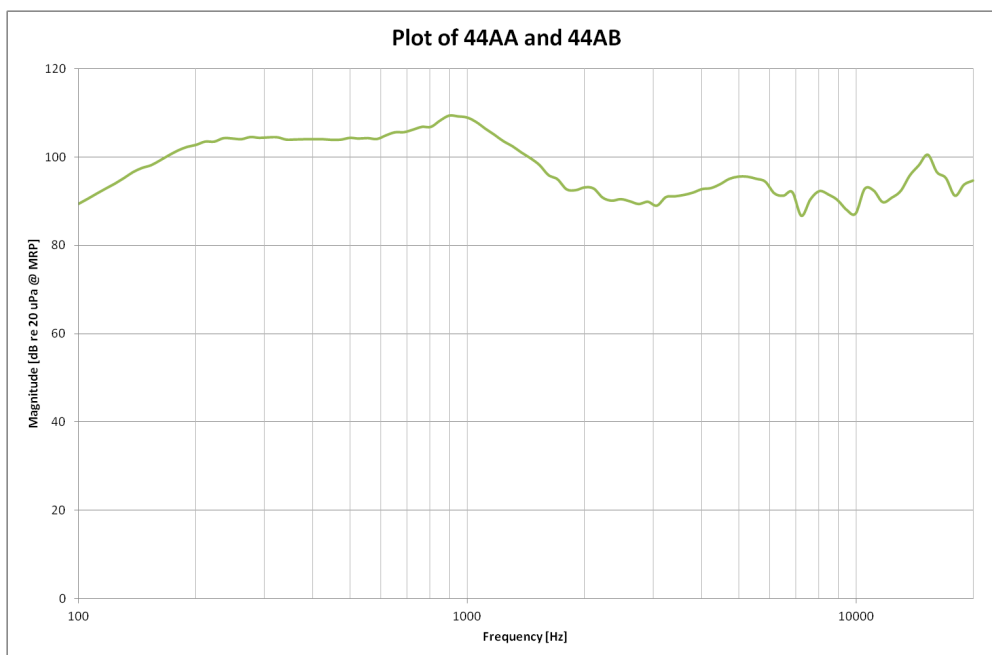
ITU-T recommendations		P.51
Connector type		BNC
IEEE standard		269, 661
Input impedance	kΩ	20
Maximum power, continuous	W	10
Maximum power, pulsed 2 sec.	W	50
Temperature range, operation	°C / °F	10 to 35 / 50 to 95
Gain	dB	10
Input signal, max.	Vrms	2
CE/RoHS compliant/WEEE registered		Yes/Yes/Yes
Weight	g / oz	1050 / 37.038

## 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 %



Frequency response

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

## Included

GRAS RA0104	Jig (CCITT P51)
GRAS RA0105	Jig (IEEE 269)

## Optional

GRAS RA0110	Conical mouthpiece
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# GRAS Worldwide

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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