

# GRAS 44AB

Mouth Simulator according to ITU-T Rec. P51



ITU-T rec.: P.51  
IEEE standards: 269, 661

GRAS 44AB 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 44AB 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 Type 44AB), 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 directly via a BNC input.

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  $1/2$ ").

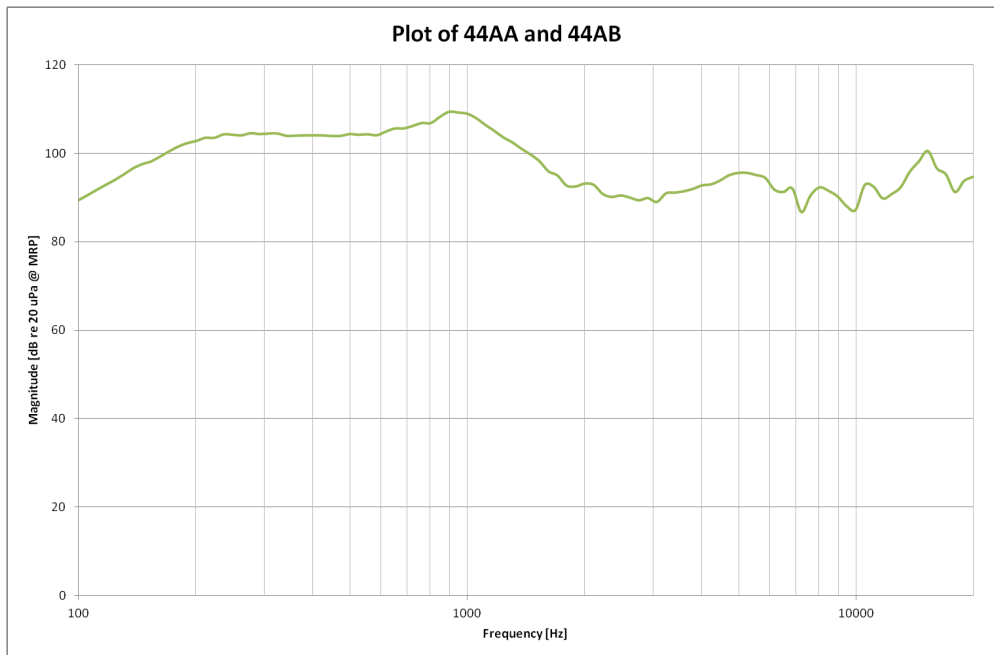
NOTE: This type of mouth simulator can not be mounted inside a KEMAR head.

|                                   |         |                     |
|-----------------------------------|---------|---------------------|
| Connector type                    |         | BNC                 |
| ITU-T recommendations             |         | P.51                |
| IEEE standard                     |         | 269, 661            |
| Maximum power, continuous         | W       | 10                  |
| Maximum power, pulsed 2 sec.      | W       | 50                  |
| Temperature range, operation      | °C / °F | 10 to 35 / 50 to 95 |
| CE/RoHS compliant/WEEE registered |         | Yes/Yes/Yes         |
| Weight                            | g / oz  | 1000 / 35.274       |

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

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

# 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](http://www.grasacoustics.com)  
[gras@grasacoustics.com](mailto:gras@grasacoustics.com)

**USA**  
**GRAS SOUND & VIBRATION**  
5750 S.W. Arctic Drive  
Beaverton, OR 97005  
Tel: 503-627-0832  
Toll Free: 800-231-7350  
[www.grasacoustics.com](http://www.grasacoustics.com)  
[sales-usa@grasacoustics.com](mailto: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](http://www.grasacoustics.com)  
[sales-uk@grasacoustics.com](mailto:sales-uk@grasacoustics.com)

**CHINA**  
**GRAS SOUND & VIBRATION**  
Room 303, Building T6  
Hongqiaohui, 990, Shenchang Road  
Minhang District, Shanghai  
China. 201106  
Tel: +86 21 64203370  
[www.grasacoustics.cn](http://www.grasacoustics.cn)  
[cnsales@grasacoustics.com](mailto: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](http://www.grasacoustics.com)

[grasacoustics.com](http://grasacoustics.com)

**GRAS** Sound  
& Vibration  
An Axiometrix Solutions Brand