

GRAS 42AE

低频校准器



声压级 140 dB
频率范围 0.01 - 250 Hz

GRAS 42AE 低频校准器可对前泄压和后泄压传声器进行低至 0.01 Hz 的频率校准。它能在极低频率下产生恒定的声压级。

典型应用与用途

- 低频压力场响应测量
- 低频相位响应测量
- 比较测量
- 1通道和2通道测量

设计

其双端口配置允许在测试待测传声器的同时，通过一个参考传声器来监测耦合腔内的实际声压。

内置的直流耦合功率放大器使得该校准器可用于正弦扫频、宽带和阶跃函数等研究。

该校准器既可用于后泄压传声器，也可用于侧泄压传声器。对于后泄压传声器 42AE 可以将传声器与前置放大器密封隔离开来，以获得不受其他泄漏影响的传声器响应。

在低于 50 Hz 的频率范围内对传声器进行校准需要特殊的设备，该设备需将整个传声器（而不仅仅是传声器振膜）暴露在校准信号的压力变化中。传声器的气压均衡系统与电子系统的放大器共同决定了其低频响应。

气压均衡必须足够快以补偿海拔和气压条件的变化，又要足够慢以免影响传声器在最低频率下的响应。大多数测量传声器的下限频率会被调整到 1 - 3 Hz 但对于次声测量以及安全气囊测试 0.1 Hz 也不罕见。

在容纳了耦合腔及其所有预装组件的 42AE 本体周围，设有输入和输出插座以及一个绿色 LED 指示灯。

42AE 随附的配件或多或少是所有测量装置通用的。手册中描述了一系列配置和测量装置，并详细说明了每种情况下所需的具体物品。

推荐使用 2通道电源模块 12AR 因为它可以在低至 0.05 Hz 的频率下使用。

Frequency range (± 1 dB)	Hz	0.01 - 100
Frequency range (± 2 dB)	Hz	0.01 - 250
Sound pressure level	dB	140
Input signal, max.	Vrms	0.7
ANSI standard		S12.42
Weight	g / oz	1.6k / 56.438

校准信号 1 mV/Pa (最大 140 dB)

GRAS Sound & Vibration 保留更改规格和配件的权利，恕不另行通知。

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 502, Building T1,
No.1398 Ali Center
Shenchang Road,
Minhang District,
Shanghai, China, 201107
Tel: +86 21 400-888-9826
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 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 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

www.GRASacoustics.com

GRAS
An Axiometrix Solutions Brand