

# GRAS 12AB

2-Channel Power Module for  
GRAS Intensity Probes



Connection: Traditional 200 V  
Channel(s): 2

The GRAS 12AB Intensity Power Module is a two channel power supply for use with versions B, C and D of the GRAS 50AI Sound Intensity Probe.

## Typical applications and use

- Sound-intensity measurements
- GRAS Sound Intensity Probe Type 50AI versions B, C, and D

## Design

The 12AB is built into a sturdy anodized aluminum cabinet and can be powered either by internal standard batteries or an external DC supply (12 V-18 V), e.g. a mains/line adapter.

The polarization voltage for the probe's microphones can be set to 200 V \* – for use with Type 50AI, or 0 V – for prepolarized microphones. The voltage supply for the probe's preamplifiers can be set to 120 V \* – for use with 50AI, or 28 V – for minimum power consumption.

The 12AB will run for up to 10 hours on fresh standard alkaline batteries. A Battery meter indicates the condition of the batteries.

The 12AB has a 9-pin D-sub socket wired up for connecting directly to the RS232 port of a computer; thus enabling software to make use of the remote control facilities of the GRAS 50AI Sound Intensity Probe. The input is a 12-pin LEMO socket on the front panel which is wired up for the GRAS 50AI Sound Intensity Probe versions B, C and D. This input is also connected to the 9 pin D-sub connector in order to:

a) Transmit the state (pressed/not pressed) of the two push buttons on the handle of the 50AI  
When pressed: the blue-button transmits DSR, the grey button transmits CTS

b) Signal the responses via the two LEDs also on the handle of the 50AI  
When lit: the red LED is signaling RTS, the white LED is signaling DTR

By suitably programming the computer's software, measurements and data acquisition can be controlled interactively via these pushbuttons and LEDs.

The two output signals of the probe are directly available via two standard BNC connectors (A and B) on the front panel.

The cabinet of the 12AB is 1/12 of a standard 19-inch rack; meaning that up to 12 of these Power Modules can be mounted in a standard 19-inch rack using the AK0040 Rack-mounting System.

## Warranty

All GRAS products are made of high-quality materials that will ensure life-long stability and robustness. The 12AB is delivered with a 2-year warranty. The warranty does not cover products that are damaged due to negligent use.

## Service and Repairs

All repairs are made at GRAS International Support Center located in Denmark. Our Support Center is equipped with the newest test equipment and staffed with dedicated and highly skilled engineers. Upon request, we make cost estimates based on fixed repair categories. If a product covered by warranty is sent for service, it is repaired free of charge, unless the damage is the result of negligent use or other violations of the warranty.

CONDITIONING		
Frequency response ( $\pm 0.2$ dB)	Hz	0.05 to 200 k
Output channel(s)		2
Output impedance	$\Omega$	30
Direct coupling input to output		No
Phase matching, equal gain, no filters		IEC 61043
Linear mode		Yes
Type		Traditional power supply (LEMO)
Input channel(s), traditional power supply		2
Preamplifier supply	V	28 / 120
Polarization voltage	V	0 / 200
Overload indication		No
PC controlable		No
External filter option		No
Power amplifier overload detection		No
POWER SUPPLY		
Power supply, battery		10 x LR6 (AA)
Power supply, external	Vdc	12 to 18
Power consumption	mA	180 to 210
Battery life, 28 V preamp. supply	h	11
Battery life, 120 V preamp. supply	h	9
Battery low indication		Yes
Fuse	mA	315 (slow)
Weight	g / oz	770 / 27.161

## Included

GRAS EL0001	10 x LR6 (AA) alkaline cells
<a href="#">GRAS AB0002</a>	DC mains/line adapter, Europe
<a href="#">GRAS AB0003</a>	DC mains/line adapter, USA

## Optional

<a href="#">GRAS AK0040</a>	19-inch Rack-mounting System
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GRAS Sound & Vibration reserves the right to change specifications and accessories without notice.

# 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 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