

# General purpose power unit/amplifier

## P702B

### SPECIFICATIONS

#### INPUT CHARACTERISTICS

Voltage to transducer	27 VDC
Current to transducer, $\pm 20\%$	2.4 mA
Input impedance	>1 M $\Omega$

#### OUTPUT CHARACTERISTICS

Output impedance	100 $\Omega$
Maximum output voltage	1:1 with DC decoupling
Noise, 2 Hz - 25 kHz, referred to input: Maximum, gain = 10 or 100	<4.5 $\mu\text{V rms}$
Spectral noise, referred as input, dB relative to $1\text{V}/\sqrt{\text{Hz}}$ :	
10 Hz	-149 dB
100 Hz	-154 dB
1 kHz	-154 dB
10 kHz	-154 dB

#### TRANSFER CHARACTERISTICS

Gain, acceleration	1, 10, 100
Gain, velocity	1, 10, 100
Gain accuracy:	
Maximum error for acceleration mode	$\pm 0.3$ dB
Maximum error for velocity mode	$\pm 0.5$ dB
Frequency response, -3 dB:	
Acceleration	0.5 - 5,000 Hz
Velocity	1.0 - 20,000 Hz

Amplitude nonlinearity	<1%
Total harmonic distortion	<1%

#### POWER REQUIREMENTS

Internal batteries	(3) 9V alkaline
Battery life	80 hours (typical)
External power, optional	24 - 30 VDC

#### ENVIRONMENTAL

Temperature range	0° to +55°C
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#### PHYSICAL CHARACTERISTICS

Dimensions, W x H x D	3 x 1 $\frac{1}{4}$ x 6"
Weight	1.25 lb
Connectors:	
Signal input	BNC
Signal output	BNC

**Accessories available:** NC3 Ni-Cad battery kit; LA704B line adaptor (110V); LA704B-220 line adaptor (220V); CC701 series charge converter



#### Key features

- Amplifier gain of 1, 10, 100
- Acceleration or velocity output
- Visible overload/fault alarm
- Manufactured in ISO 9001 facility

Note: Due to continuous process improvement, specifications are subject to change without notice.  
This document is cleared for public release.