



## SERIES 426

# PREAMPLIFIERS FOR MEASUREMENT MICROPHONES

- Low electrical noise specifications
- Low attenuation/gain specifications
- 20 Hz filter available
- A-Weight filtering available
- Vent holes for faster stabilization and consistent measurements
- 10 dB gain available
- High temperature
- For use with 1/4" and 1/2" microphones (adapters for 1/8" and 1" microphones)
- Interchangeable with competitive models
- CE compliant



## USE OF SERIES 426

Preamplifiers allow high impedance signals to be converted to low impedance signals. This minimizes stray capacitance, allows for higher frequency measurements, and longer cable lengths to be utilized. PCB® manufactures preamplifiers for test and measurement microphones.

## POLARIZATION VOLTAGE – ICP® (0V) PREPOLARIZED

PCB is the inventor of ICP® sensor power technology. All manufacturers of IEC 61094-4 compliant prepolarized (0V) microphones use the technology that PCB developed. Prepolarized microphones operate on 2-20 mA constant current supply and use coaxial cables resulting in significant per channel cost savings over the PCB 200V models. Other ICP® compatible sensors such as accelerometers, force, strain, and pressure sensors use the same power supplies and cables as prepolarized microphones, further reducing set-up time and initial investment costs.

# PCB® QUALITY COMMITMENT

PCB is uniquely equipped with a state of the art, CNC machining facility, allowing control over quality, pricing, and delivery. Investments in clean rooms, anechoic, and environmental test chambers, combined with our rigorous testing and aging process, ensures our products will survive in demanding environmental conditions. PCB has the industry's best 5-year warranty with a "Total Customer Satisfaction" policy.

PPREAMPLIFIERS FOR 1/2" (12MM) MICROPHONES (AND 1/4" AND 1" MICROPHONES WITH OPTIONAL ADAPTERS)						
Model Number	426A10	426A11	426A13	426A30	426E01	HT426E01
Polarization Design	Prepolarized	Prepolarized	Prepolarized	Ext. Polarized	Prepolarized	Prepolarized
Attenuation/Gain	-0.1 dB [1][2]	-0.16 dB [1][2]	-0.2 dB [1][2]	-0.2 dB [1][2]	-0.05 dB [1][2]	-0.06 dB [1][2]
Electrical Noise (A-Wt)	< 3.6 µV [1]	< 7.5 µV [1]	< 3 µV [1]	< 2.8 µV [2]	< 2.8 µV [2]	< 4.9 µV [1]
Electrical Noise (Linear)	< 11.2 µV [1]	< 5.7 µV [1]	< 6 µV [1]	< 5.0 µV [2]	< 5.0 µV [2]	< 13.4 µV [1]
Output Voltage (Maximum)	± 7 V pk	± 5 V pk	± 8 V pk	± 14 V pk	± 7 V pk	± 7 V pk
Frequency Response	80 Hz to 125 kHz ± 0.1 dB	5 Hz to 125 kHz ± 0.2 dB	10 Hz to 126 kHz ± 0.2 dB	10 Hz to 126 kHz ± 0.1 dB	6.3 Hz to 125 kHz ± 0.1 dB	6.3 Hz to 126 kHz ± 0.1 dB
TEDS IEEE 1451	Yes [3]	Yes [3]	Yes [3]	n/a	Yes [3]	Yes [3]
Temperature Rating (Operating)	-40 to +176 °F -40 to +80 °C	-4 to +158 °F -20 to +70 °C	-40 to +158 °F -40 to +70 °C	-40 to +185 °F -40 to +85 °C	-40 to +176 °F -40 to +80 °C	-40 to +257 °F -40 to +125 °C
Connector	BNC Jack	BNC Jack	BNC Jack	7 Pin LEMO	BNC Jack	BNC Jack
Features	20 Hz HP Filter	Gain & Filter Switches	Short	200 V	Low Noise & General Purpose	High Temperature

Notes: [1] Measured with an 18 pF reference microphone. [2] Typical. [3] TEDS Capable Digital Memory and Communication, compliant with IEEE 1451.4.

PREAMPLIFIERS FOR 1/4" (6MM) MICROPHONES (AND 1/8" AND 1/2" MICROPHONES WITH OPTIONAL ADAPTERS)				
Model Number	426A05	426A07	426B31	426B03
Polarization Design	Prepolarized	Prepolarized	Ext. Polarized	Prepolarized
Attenuation/Gain	-0.19 dB [1]	-0.19 dB [1]	-0.14 dB [2]	-0.19 dB [1][2]
Electrical Noise (A-Wt)	< 3.2 µV [1]	< 2.5 µV [1]	< 3.8 µV	< 3.2 µV [2]
Electrical Noise (Linear)	< 5.6 µV [1]	< 5.6 µV [1]	< 9.3 µV [2]	< 5.6 µV [2]
Output Voltage (Maximum)	± 8 V pk	± 8 V pk	± 50 V [2]	± 8 V pk
Frequency Response	5 Hz to 126 kHz ± 0.1 dB	2.5 Hz to 126 kHz ± 0.2 dB	3.98 Hz to 126 kHz ± 0.5 dB	5 Hz to 126 kHz ± 0.1 dB
TEDS IEEE 1451	Yes [3]	Yes [3]	Yes [3]	Yes [3]
Temperature Rating (Operating)	-40 to +158 °F -40 to +70 °C	-40 to +158 °F -40 to +70 °C	-4 to +167 °F -20 to +75 °C	-40 to +158 °F -40 to +70 °C
Connector	10-32 Coax	10-32 Coax	7 Pin LEMO	10-32 Coax
Features	Ventless	Short	200 V	General Purpose

Notes: [1] Measured with an 18 pF reference microphone. [2] Typical. [3] TEDS Capable Digital Memory and Communication, compliant with IEEE 1451.4.

When selecting a preamplifier it is important to choose one that is optimal for your application, is reliable and is manufactured by a company that is easy to do business with. Our products are backed by a best-in-class, 5 year warranty and our "Total Customer Satisfaction" (TCS) no risk policy. Application support is available from the 24 Hour SensorLine<sup>SM</sup>.



## "A-WEIGHTING" FILTER

MODEL 426B02

- In-line with BNC connectors
- Powered by 4 mA constant current
- ICP<sup>®</sup> compatible