

**IE-6P Microphone Preamplifier**



**IE-6P Microphone Preamplifier with  
Model 1133 Microphone Capsule**



*When combined with a precision microphone and operated as an integrated mic/preamp, the IE-6P conforms to IEC 61672 Class 1 requirements*

## Description

The Model IE-6P Microphone Preamplifier is intended for use with precision, 1/2 inch, air condenser microphones. It provides polarization voltages of either 200 VDC or 28 VDC and is compatible with numerous microphone capsules from several different manufactures.

When combined with a precision microphone and operated as an integrated mic/preamp, the IE-6P conforms to IEC 61672 Class 1 requirements

The IE-6P is mechanically stable and rugged, with the performance you would expect from a precision microphone preamplifier. Its stainless steel housing is designed to withstand the rigors of use in the field.

Measurement performance with the IE-6P is of the highest standard. The IE-6P is extremely wide range, has a very low electronic noise floor and a wide dynamic range. The low output impedance allows for driving relatively long microphone lines. The Mini QG® 4-pin connector is mechanically reliable and economical. A standard 3-conductor, shielded microphone cable is all that is required.

## Technical Specifications (IE-6P Preamplifier Without Microphone)

Frequency Response	re: 1kHz, $\pm 0.1$ dB -3dB lower limit freq.	17Hz to 110kHz < 2Hz
Polarization Voltages	Selectable	200 or 28 VDC
Phase Linearity	< 1°	10Hz to 20kHz
Attenuation (typical)		0.05dB
Electronic Noise	A-weight Flat, 20Hz -20kHz	< 5 $\mu$ V (2.0 $\mu$ V typical) < 8 $\mu$ V (5.0 $\mu$ V typical)
Maximum Output Voltage (IE-35)		8 V <sub>pp</sub> (< -50dB THD)
Max dB w/ 50 mV/Pa mic (IE-35)		133dB
Max dB w/ 12.5 mV/Pa mic (IE-35)		145dB
Maximum Output Voltage (IE-45)		28 V <sub>pp</sub> (< -50dB THD)
Max dB w/ 50 mV/Pa mic (IE-45)		144dB
Max dB w/ 12.5 mV/Pa mic (IE-45)		156dB
Temperature Sensitivity	-40°C to +65°C	$\pm 0.5$ dB
Humidity Sensitivity	(0-95% RH, non cond.)	$\pm 0.5$ dB
Input Impedance		10 G $\Omega$ /0.15pF
Output Impedance		< 50 $\Omega$
Dimensions	Diameter Length	12.7mm (0.50") 115.6mm (4.55")
Connections	Input  Output	11.7mm-60 UNS (0.4606-60 UNS) Mic Thread Switchcraft Mini QG TA4F
Power	Excitation Voltages	12 V (IE-35), 36V (IE-45)