

IE-6P Microphone Preamplifier



**IE-5P Microphone Preamplifier with
Model 1201 Microphone Capsule**



When combined with a precision microphone and operated as an integrated mic/preamp, the IE-5P conforms to IEC 61672 Class 1 requirements

Description

The Model IE-6P Microphone Preamplifier is intended for use with precision, prepolarized, 1/2 inch, condenser microphones.

Compared to a traditional, but expensive, air condenser microphone capsule with its associated preamplifier, a prepolarized microphone capsule with an appropriate preamplifier can significantly reduce the cost associated with precision sound measurements.

The IE-5P 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-5P is of the highest standard. The IE-5P 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-5P Preamplifier Without Microphone)

Frequency Response	re: 1kHz, ± 0.1 dB -3dB lower limit freq.	17Hz to 110kHz < 2Hz
Phase Linearity	< 1°	10Hz to 20kHz
Attenuation (typical)		0.05dB
Electronic Noise	A-weight Flat, 20Hz -20kHz	< 5 μ V (2.0 μ V typical) < 8 μ V (5.0 μ V typical)
Maximum Output Voltage (IE-35)		8 V _p (< -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 _{pp} (< -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	± 0.5 dB
Humidity Sensitivity	(0-95% RH, non cond.)	± 0.5 dB
Input Impedance		10 G Ω /0.15pF
Output Impedance		< 50 Ω
Dimensions	Diameter Length	12.7mm (0.50") 90mm (3.55")
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)