

## PC-40 with IE-2M Microphone

## IE-30A with IE-2P Microphone

# INSTRUMENTATION

## MICROPHONES AND PREAMPLIFIERS



*Precision (Type I) Microphone Capsule/Preamplifier Combinations*

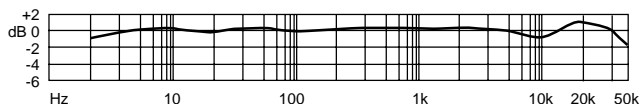
### 1133 Free Field Response Microphone

**Applications:** The Ivie 1133 Free Field Microphone is a 1/2 inch air condenser microphone intended for use in free, or nondiffuse sound fields. It should be used when measuring point source sound in the direct wave where little or no reverberant energy is present. The microphone should be pointed directly at the sound source such that the diaphragm is perpendicular to the sound source. Some typical examples of free field measurements include near field measurements of machinery noise, airport noise (noise from overhead airplanes) and measurement of traffic noise.

### 1134 Random Pressure Response Microphone

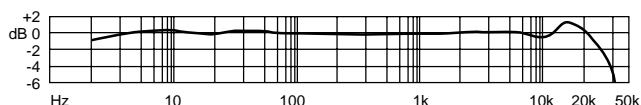
**Applications:** The 1134 Random Pressure Microphone is a 1/2 inch air condenser microphone intended for use in reverberant environments where the sound being measured is a mixture of both direct and reflected (reverberant) energy. Some typical applications include auditorium measurements such as frequency response (for equalization purposes), RT60 and seat to seat SPL variation.

### 1133 Air Condenser Microphone Free Field Frequency Response



Above curve is typical for free field corrected response of electrostatic curve (includes grid cap.)

### 1134 Air Condenser Microphone Random Pressure Frequency Response



Above curve is typical for random pressure response of electrostatic curve (includes grid cap.)

### 1133 and 1134 Specifications

**Sensitivity Level:** Nominal -36dB re 1V per N/m<sup>2</sup>  
16 mV per Pascal

**Acoustic Noise:** 18dBA SPL.  $1.4 \times 10^{-6}$  Pascals/ $\sqrt{\text{Hz}}$

**Dynamic Range:** From acoustic noise to > 158dBA  
SPL (3% THD)

**Stability:** >900 yrs/dB (23° C) >2hrs/dB (150° C)

**Impedance:** >10Ω //19pf (1133), 18pf (1134)

**Mechanical:**

Cartridge height w/grid cap: .490 in. (12.5 mm)

Cartridge height w/o grid cap: .452 in. (11.5 mm)

Cartridge diameter w/grid cap: .519 in. (13.2 mm)

Cartridge dia. w/o grid cap: .500 in. (12.7 mm)

Cartridge threads: .460 in. - 60 NS2

### IE-2P Microphone Preamplifier

The IE-2P Microphone Preamplifier is a microphone preamplifier that can be used with all precision, air condenser microphone capsules that require polarization voltages of 28 or 200 Vdc and comply with international thread standards. Manufacturers of such microphones include Ivie, Brüel & Kjær, ACO Pacific, Larsen•Davis and others.

The IE-2P accepts 1/2 inch microphones directly. With the proper adaptors, 1 inch, 1/4 inch and 1/8 inch microphones can also be used.

### IE-2P Specifications:

**Frequency Response:**  $\pm 0.2\text{dB}$ , 5Hz - 40kHz  
(18pf source capacitance)

**Input Impedance:** 2 GΩ at 100 Hz

**Input Capacitance:** <25pf

**Polarization Voltages:** 28 or 200 Vdc selectable

**Input Voltage Requirements:** 12 Vdc

### Mechanical:

**Construction:** Stainless Steel Tube

**Length:** 8.2 inches

**Diameter:** Dual: 3/4 inch and 1/2 inch

**Interface Connector:** Switchcraft A6F 6 pin



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