



## C617 High Voltage Omnidirectional Microphone

The **Josephson C617** is the second generation of our high voltage metal diaphragm omnidirectional microphone, suitable for the most critical sound recording and measurement applications. It operates from standard P48 phantom power yet provides full 200 volt polarize potential for a lab grade standard "half inch" microphone capsule. The C617SET is supplied with a Microtech Gefell MK221 capsule. The dynamic range is dependent on the inherent noise of the microphone capsule and the limits of P48 phantom power. The Josephson cascode FET front end circuitry introduced in the C606 is further refined in the C617, combined with our traditional balanced bipolar class-A symmetrical output stage.

For music recording, the Josephson balanced symmetrical circuitry together with a sub-micron thickness metal diaphragm capsule translate to the purest, most open sound possible. Pickup of sound pressure alone results in no proximity effect, very low sensitivity to wind noise, and phase accuracy that cannot be obtained with directional microphones. Spot-miking applications or overall stereo pickups using spaced pairs take on a new level of detail and precision not possible with other types. The small capsule size results in a nearly perfect omnidirectional pattern for accurate pickup of the whole acoustic environment.

### Specifications of C617SET

Frequency Response	10 Hz – 20 kHz $\pm 1$ dB
Equivalent noise level	14 dB SPL, A-weighted
Sensitivity	66 mV/Pa (-24 dB ref 1V/Pa)
Maximum output level	+7dBV for <1% THD, 1k $\Omega$ load (127 dB SPL)
Output impedance	50 $\Omega$ (minimum load impedance 1k $\Omega$ )
Power requirements	P48 phantom per IEC 61938, <5 mA
Temperature Range,	-10 to +50°C
Dimensions	21mm dia, 176mm long (with capsule)
Weight	120g

### Specifications of C617 body alone, for use with other capsules, as above except:

Frequency Response	10 Hz – 80 kHz $\pm 1$ dB
Equivalent noise level	<2.5 $\mu$ V A-weighted, <6.5 $\mu$ V CCIR quasi-peak
Gain	2.5 dB (balanced symmetrical direct coupled output)
Maximum output level	+7dBV for <1% THD, 1k $\Omega$ load
Output impedance	50 $\Omega$ (minimum load impedance 1k $\Omega$ )
Capsule polarization	200V
Dimensions	21mm dia, 165mm long (with capsule)
Weight	110g

