

Open circuit sensitivity is a rating of how efficient the microphone is in converting sound into an electrical signal. For a given sound pressure level it rates how much voltage the microphone will output. This is tested by putting a 1kHz tone at a sound pressure level of 1 Pascal or 94 dB SPL into the input of the microphone capsule and the voltage output is recorded.

The AE3000 cardioid condenser microphone has an Open Circuit Sensitivity of -43 dBV (7.0 mV) re 1V at 1Pa. This means that a 1 kHz tone at a sound pressure level of 1 Pascal produces a voltage of 7.0 millivolts. The output voltage in decibels is referenced to 1 volt (dB re 1V) by using the following formula $20\text{Log}(0.007) = -43.098 \text{ dBV}$.