



- All-purpose condenser microphone ideal for handheld interviews and general audio acquisition
- Cardioid polar pattern reduces pickup of sounds from the sides and rear, improving isolation of desired sound source
- Switchable 80 Hz high-pass filter minimizes pickup of undesired low-frequency sounds
- · Operates on battery or phantom power

The AT8033 requires 11 to 52V DC phantom power *or* a 1.5V AA battery for operation. A battery need not be in place for phantom power operation.

Battery installation: Unscrew the lower section of the microphone body, just below the nameplate. Insert a fresh 1.5V AA battery in the handle compartment ("+" end up), then reassemble the microphone. Alkaline batteries are recommended for longest life. Remove the battery during long-term storage.

Output from the microphone's XLRM-type connector is low impedance (Lo-Z) balanced. The signal appears across Pins 2 and 3; Pin 1 is ground (shield). Output phase is "Pin 2 hot" – positive acoustic pressure produces positive voltage at Pin 2.

To avoid phase cancellation and poor sound, all mic cables must be wired consistently: Pin 1-to-Pin 1, etc.

An integral 80 Hz high-pass filter provides easy switching from a flat frequency response to a low-end roll-off. The roll-off position reduces the pickup of low-frequency ambient noise (such as traffic, air-handling systems, etc.), room reverberation and mechanically coupled vibrations.

The high sensitivity of the AT8033 assures useful output and an excellent match to most input sources. In some cases, however, an attenuator such as the Audio-Technica AT8202 may be required between the microphone and preamplifier to avoid overloading sensitive input stages.

The microphone is RoHS compliant–free from all substances specified in the EU directive on hazardous substances.

Avoid leaving the microphone in the open sun or in areas where temperatures exceed 110° F (43° C) for extended periods. Extremely high humidity should also be avoided.

AT8033 SPECIFICATIONS [†]	
ELEMENT	Fixed-charge back plate permanently polarized condenser
POLAR PATTERN	Cardioid
FREQUENCY RESPONSE	30-20,000 Hz
LOW FREQUENCY ROLL-OFF	80 Hz, 12 dB/octave
OPEN CIRCUIT SENSITIVITY (Phantom / Battery)	-44 dB (6.3 mV) / -45 dB (5.6 mV) re 1V at 1 Pa*
IMPEDANCE (Phantom / Battery)	250 ohms / 300 ohms
MAXIMUM INPUT SOUND LEVEL (Phantom / Battery)	137 dB / 123 dB SPL, 1 kHz at 1% T.H.D.
DYNAMIC RANGE (typical) (Phantom / Battery)	113 dB / 99 dB, 1 kHz at Max SPL
SIGNAL-TO-NOISE RATIO ¹	70 dB, 1 kHz at 1 Pa*
PHANTOM POWER REQUIREMENTS	11-52V DC, 2 mA typical
BATTERY TYPE	1.5V AA/UM3
BATTERY CURRENT / LIFE	0.4 mA / 1200 hours typical (alkaline)
SWITCH	Flat, roll-off
WEIGHT (less accessories)	159 g (5.6 oz)
DIMENSIONS	194.2 mm (7.65") long, 26.0 mm (1.02") head diameter
OUTPUT CONNECTOR	Integral 3-pin XLRM-type
ACCESSORIES FURNISHED	AT8405a stand clamp for \$/s"-27 threaded stands; \$/s"-27 to \$/s"-16 threaded adapter; AT8136 windscreen; battery; soft protective pouch

[†]In the interest of standards development, A.T.U.S. offers full details on its test

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methods to other industry professionals on request.
*1 Pascal = 10 dynes/cm² = 10 microbars = 94 dB SPL

¹ Typical, A-weighted, using Audio Precision System One. Specifications are subject to change without notice.

Polar Pattern Frequency Response