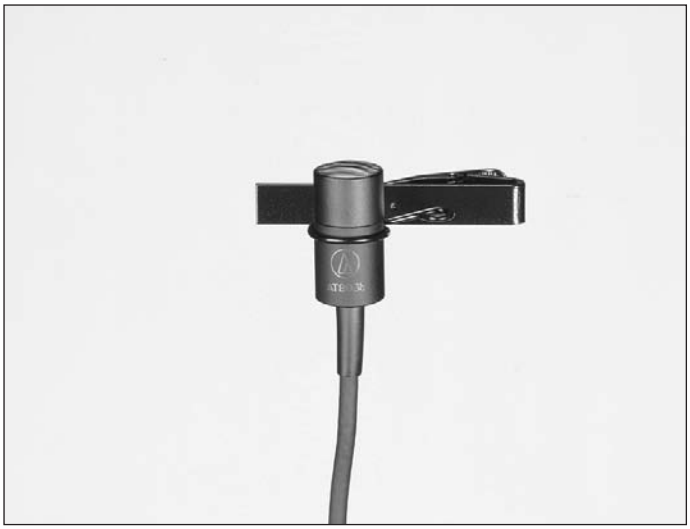
AT803b *MINIATURE OMNIDIRECTIONAL CONDENSER MICROPHONE*

BROADCAST & PRODUCTION MICROPHONES



- High intelligibility for lecturers and stage/TV performers
- Provides excellent yet unobtrusive sound pickup
- Switchable low-frequency roll-off
- Operates on battery or phantom power

The AT803b is designed to be worn as a lavalier or hidden in loose clothing or in the hair. For use as a lavalier, attach the microphone about six inches below the chin. Anticipate movements that may cause the microphone to rub against or be covered by clothing, and position the microphone to avoid it.

The AT803b requires 11-52V DC phantom power, *or* a 1.5V AA battery for operation. A battery need not be in place for phantom power operation.

Battery installation: Remove the cap from the top of the power module. Insert a fresh 1.5V AA battery ("+" end toward the cap release button), then reassemble the power module. Alkaline batteries are recommended for longest life. Remove the battery during long-term storage.

Output from the power module'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.

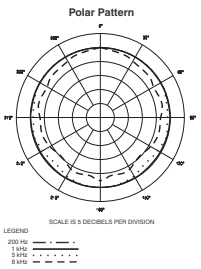
An integral 80 Hz high-pass filter provides easy switching from a flat frequency response to a low-end roll-off. The roll-off position reduces the microphone's sensitivity to popping in close vocal use. It also reduces the pickup of low-frequency ambient noise (such as traffic, air-handling systems,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

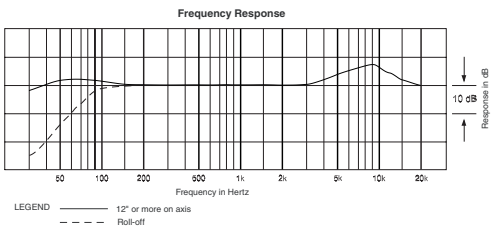
Avoid leaving the microphone in the open sun or in areas where temperatures exceed 110° F (43° C) for extended periods. Extremely high humidity should also be avoided.

AT803b SPECIFICATIONS†

ELEMENT	Fixed-charge back plate permanently polarized condenser
POLAR PATTERN	Omnidirectional
FREQUENCY RESPONSE	30-20,000 Hz
LOW FREQUENCY ROLL-OFF	80 Hz, 18 dB/octave
OPEN CIRCUIT SENSITIVITY (Phantom / Battery)	–45 dB (5.6 mV) / –46 dB (5.0 mV) re 1V at 1 Pa*
IMPEDANCE (Phantom / Battery)	200 ohms / 270 ohms
MAXIMUM INPUT SOUND LEVEL (Phantom / Battery)	135 dB / 121 dB SPL, 1 kHz at 1% T.H.D.
DYNAMIC RANGE, (typical) (Phantom / Battery)	106 dB / 92 dB, 1 kHz at Max SPL
SIGNAL-TO-NOISE RATIO[1]	65 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	Off, on-flat, on-roll-off
WEIGHT (less cable and accessories)	
MICROPHONE	0.09 oz (2.5 g)
POWER MODULE	4.9 oz (139 g)
DIMENSIONS	
MICROPHONE	0.81" (20.5 mm) long, 0.39" (10.0 mm) diameter
POWER MODULE	3.31" (84.0 mm) H x 2.48" (63.0 mm) W x 0.87" (22.0 mm) D
OUTPUT CONNECTOR (power module)	Integral 3-pin XLRM-type
CABLE	6' (1.8 m) long (permanently attached to microphone), 0.10" (2.6 mm) diameter, 2-conductor, shielded cable with TA3F-type connector
ACCESSORIES FURNISHED	AT8417 clothing clip; AT8531 power module; AT8116 windscreen; battery; protective carrying case

†In the interest of standards development, A.T.U.S. offers full details on its test methods to other industry professionals on request.
*1 Pascal = 10 dynes/cm^2 = 10 microbars = 94 dB SPL
[1] Typical, A-weighted, using Audio Precision System One.
Specifications are subject to change without notice.





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