

ATM610a/S

artist series live sound microphones

Hypercardioid Dynamic Handheld Microphone with Switch



Features

- Tuned for clear, detailed, extended-range reproduction of lead and backup vocals
- Superior anti-shock engineering ensures low handling noise and quiet performance
- Hi-ENERGY® neodymium magnet for improved output and transient response
- Hypercardioid polar pattern reduces pickup of sounds from the sides and rear, improving isolation of desired sound source
- MagnaLock™ on-off switch provides silent operation
- Multi-stage windscreen effectively controls popping, distortion from sibilant sounds and wind noise
- Rugged, all-metal design and construction for years of trouble-free use
- Corrosion-resistant contacts from gold-plated XLRM-type connector
- Quiet-Flex™ stand clamp provides silent, flexible microphone positioning

Description

The ATM610a/S is a dynamic microphone with a hypercardioid polar pattern. It is designed specifically for lead and backup vocal use in professional live-sound applications.

The hypercardioid polar pattern of the microphone is more sensitive to sound originating directly in front of the element, making it useful for controlling feedback, reducing pickup of unwanted sounds and providing isolation between performers.

The output of the microphone is a 3-pin XLRM-type connector.

The microphone is enclosed in a rugged housing. Its multi-stage windscreen effectively controls popping, distortion from sibilant sounds and wind noise. The included AT8470 Quiet-Flex™ stand clamp permits mounting on any microphone stand with $\frac{5}{8}$ "-27 threads. A soft protective pouch is also included.

Operation and Maintenance

Output 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. For a high-impedance (Hi-Z) mic input, connect a Lo-Z balanced cable to a Hi-Z matching transformer at the equipment input.

When using the microphone in settings with a stage monitor speaker, the speaker should be located 135° off axis (45° off the rear of the microphone). This placement, in conjunction with the microphone's uniform hypercardioid pickup pattern, will virtually eliminate the possibility of undesired audio feedback.

The ATM610a/S utilizes a MagnaLock on/off switch. This specially designed switch operates silently and may be locked in the "on" position to prevent accidental turn-off during use. To lock, slide the switch up into the "on" position (Fig. 1a). Using a small flat-head screwdriver, rotate the small screw in the center of the switch 90 degrees ($\frac{1}{4}$ turn) counter-clockwise (Fig. 1b). Never force the screw. When the screw slot position is horizontal ("across" the microphone body), the switch is locked. To unlock the switch, turn the screw 90 degrees clockwise until the screw slot position is again vertical (in line with the microphone body). Never try to turn the switch more than 90 degrees or $\frac{1}{4}$ rotation. The switch may only be locked in the "on" position. Do not try to turn the screw when the switch is in the "off" position.

Take care to keep foreign particles from entering the windscreen. An accumulation of iron or steel filings on the diaphragm, and/or foreign material in the windscreen's mesh surface, can degrade performance.

Architect's and Engineer's Specifications

The microphone shall be a moving coil dynamic designed for handheld or stand use. It shall have a hypercardioid polar pattern with a uniform 100° angle of acceptance and a frequency response of 40 Hz to 16,000 Hz. Nominal open-circuit output voltage shall be 1.7 mV at 1V, 1 Pascal. Output shall be low impedance balanced (600 ohms).

The output of the microphone shall be a 3-pin XLRM-type connector.

The microphone shall include an on/off switch.

The microphone shall be 177.0 mm (6.97") long and have a head diameter of 48.0 mm (1.89"). Weight shall be 270 grams (9.5 oz). The microphone shall include a stand clamp and a soft protective pouch.

The Audio-Technica ATM610a/S is specified.

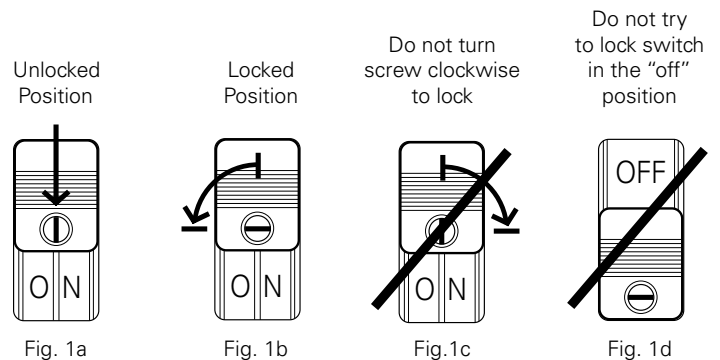


Fig. 1a

Fig. 1b

Fig. 1c

Fig. 1d

Specifications

Element	Dynamic
Polar pattern	Hypercardioid
Frequency response	40-16,000 Hz
Open circuit sensitivity	-55 dB (1.7 mV) re 1V at 1 Pa
Impedance	600 ohms
Switch	MagnaLock™ on/off
Weight	270 g (9.5 oz)
Dimensions	177.0 mm (6.97") long, 48.0 mm (1.89") maximum diameter
Output connector	Integral 3-pin XLRM-type
Audio-Technica case style	T6
Accessories furnished	AT8470 Quiet-Flex™ stand clamp for 5/8"-27 threaded stands; 5/8"-27 to 3/8"-16 threaded adapter; soft protective pouch

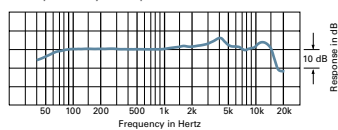
In the interest of standards development, A.T.U.S. offers full details on its test methods to other industry professionals on request.

1 Pascal = 10 dynes/cm² = 10 microbars = 94 dB SPL

Specifications are subject to change without notice.



frequency response: 40–16,000 Hz



polar pattern

