

ATM510

artist series live sound microphones

Cardioid Dynamic Handheld Microphone



Features

- **Natural, full-range vocal reproduction**
- **Superior anti-shock engineering ensures low handling noise and quiet performance**
- **Hi-ENERGY® neodymium magnet for improved output and transient response**
- **Excellent off-axis rejection for minimum feedback**
- **Cardioid polar pattern reduces pickup of sounds from the sides and rear, improving isolation of desired sound source**
- **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 ATM510 is a dynamic microphone with a cardioid polar pattern. It is designed specifically for close-up vocal use in professional live-sound applications.

The cardioid 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 180° off axis (at the rear of the microphone). This placement, in conjunction with the microphone's uniform cardioid pickup pattern, will virtually eliminate the possibility of undesired audio feedback.

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 cardioid polar pattern with a uniform 120° angle of acceptance and a frequency response of 90 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 (300 ohms).

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

The microphone shall be 170.0 mm (6.69") long and have a head diameter of 53.7 mm (2.11"). Weight shall be 258 grams (9.1 oz). The microphone shall include a stand clamp and a soft protective pouch.

The Audio-Technica ATM510 is specified.

Specifications

| | |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Element | Dynamic |
| Polar pattern | Cardioid |
| Frequency response | 90-16,000 Hz |
| Open circuit sensitivity | -55 dB (1.7 mV) re 1V at 1 Pa |
| Impedance | 300 ohms |
| Weight | 258 g (9.1 oz) |
| Dimensions | 170.0 mm (6.69") long, 53.7 mm (2.11") maximum diameter |
| Output connector | Integral 3-pin XLRM-type |
| Audio-Technica case style | T6 |
| Accessories furnished | AT8470 Quiet-Flex™ stand clamp for $\frac{5}{8}$ "-27 threaded stands; $\frac{5}{8}$ "-27 to $\frac{3}{8}$ "-16 threaded adapter; soft protective pouch |

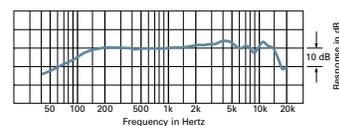
In the interest of standards development, A.T.U.S. offers full details on its test methods to other industry professionals on request.

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

Specifications are subject to change without notice.

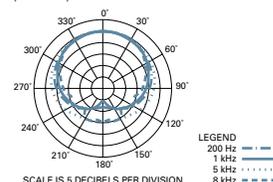


frequency response: 90–16,000 Hz



LEGEND — 12° or more on axis

polar pattern



 **audio-technica**

Audio-Technica U.S., Inc., 1221 Commerce Drive, Stow, Ohio 44224
Audio-Technica Limited, Unit 5 Millennium Way, Leeds LS11 5AL England
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0001-0284-00