ATM250

Hypercardioid Dynamic Instrument Microphone

Features
- Frequency response tailored for kick drum, percussion, brass and other highly dynamic instruments
- Ideal for voiceovers, the ATM250 offers very full sound on close-up vocals and dialogue
- Handles very high SPL at close range
- Big, warm low-frequency response with excellent presence
- Hi-ENERGY® neodymium magnet for improved output and transient response
- Hypercardioid polar pattern provides maximum feedback rejection and isolation of desired sound source
- Rugged all-metal design and construction for years of trouble-free use
- Corrosion-resistant contacts from gold-plated XLRM-type connector
- Isolation clamp provides secure mounting, versatile positioning and effective dampening of unwanted mechanical noise

Description
The ATM250 is a dynamic microphone with a hypercardioid polar pattern. It is designed specifically for musical instrument pickup in the studio and on stage.

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 and reducing pickup of unwanted sounds.

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

The microphone is enclosed in a rugged housing. The included AT8471 isolation clamp permits mounting on any microphone stand with 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.

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. It shall have a hypercardioid polar pattern with a uniform 100° angle of acceptance and a frequency response of 40 Hz to 15,000 Hz. Nominal open-circuit output voltage shall be 1.9 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 be 127.5 mm (5.02”) long and have a diameter of 55.0 mm (2.17”). Weight shall be 252 grams (8.9 oz). The microphone shall include an isolation clamp and a soft protective pouch.

The Audio-Technica ATM250 is specified.

Specifications

<table>
<thead>
<tr>
<th>Element</th>
<th>Dynamic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polar pattern</td>
<td>Hypercardioid</td>
</tr>
<tr>
<td>Frequency response</td>
<td>40-15,000 Hz</td>
</tr>
<tr>
<td>Open circuit sensitivity</td>
<td>-54 dB (1.9 mV) re 1V at 1 Pa</td>
</tr>
<tr>
<td>Impedance</td>
<td>600 ohms</td>
</tr>
<tr>
<td>Weight</td>
<td>252 g (8.9 oz)</td>
</tr>
<tr>
<td>Dimensions</td>
<td>127.5 mm (5.02&quot;) long, 55.0 mm (2.17&quot;) diameter</td>
</tr>
<tr>
<td>Audio-Technica case style</td>
<td>Integral 3-pin XLRM-type R9</td>
</tr>
<tr>
<td>Accessories furnished</td>
<td>AT8471 isolation clamp for ½&quot;-27 threaded stands; ¾&quot;-27 to ¾&quot;-16 threaded adapter; soft protective pouch</td>
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</tbody>
</table>

Specifications are subject to change without notice.

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

Build Quality
Audio-Technica microphones are precision-engineered to provide reliable, trouble-free performance for years to come. Each microphone is the result of Audio-Technica’s commitment to quality and craftsmanship. Quality and reliability are built into every Audio-Technica microphone, starting with the finest components and materials selected for performance and durability.

Audio-Technica Quality Assurance Program
Audio-Technica’s Quality Assurance Program is designed to prevent any microphone from leaving the factory with a defect. Extensive testing and inspection are performed on each microphone throughout its production to ensure high-quality performance. Audio-Technica’s Quality Assurance Program includes a 100% review of each microphone to ensure that all parts are correctly placed and properly operating. Each microphone is also tested for frequency response, sensitivity, feedback and noise characteristics. With Audio-Technica’s Quality Assurance Program, you can be confident that your microphone will deliver undisputed performance, day in and day out.

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