

# AE2300

## Cardioid Dynamic Instrument Microphone

 **audio-technica**

artist elite® live sound microphones



### Features

- **Tailored to capture sound from guitar amps, brass and woodwinds, drums and percussion instruments with equal clarity and precision**
- **Proprietary double-dome diaphragm construction improves high-frequency and transient response**
- **Excels in high-SPL applications and maintains directionality across the entire frequency range**
- **Minimal off-axis coloration (frequency response is nearly identical at 0°, 90°, and 180°) helps to maintain phase coherence in multiple microphone setups**
- **Switchable low-pass filter removes harsh, high-frequency content without negatively affecting the overall tone of an instrument**
- **Low-profile design allows microphone to be placed easily and unobtrusively in a wide variety of setups**
- **Rugged, brass metal construction ensures dependable performance in live music applications**
- **Isolation stand clamp provides secure mounting, versatile positioning, and effective dampening of unwanted mechanical noise**

### Description

The AE2300 is a dynamic microphone with a cardioid polar pattern. It is designed specifically for musical instrument pickup in the studio and on stage.

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 and reducing pickup of unwanted sounds.

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

The microphone is equipped with a switch that permits choice of flat response or high-frequency roll-off (via integral 6 kHz low-pass filter).

The microphone is enclosed in a rugged housing. The included AT8471 isolation 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.

An integral 6,000 Hz low-pass filter provides easy switching from a flat frequency response to a high-end roll-off. The roll-off position reduces the pickup of high-frequency noise, such as hiss from a guitar amp or high-hat bleed into the snare sound. To engage the low-pass filter, use the end tip of a paperclip or other small pointed instrument to slide the switch toward the "bent" line.

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.

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 cardioid polar pattern with a uniform 120° angle of acceptance and a frequency response of 60 Hz to 20,000 Hz. Nominal open-circuit output voltage shall be 1.4 mV at 1V, 1 Pascal. Output shall be low impedance balanced (250 ohms).

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

The microphone shall be equipped with a switch that permits choice of flat response or 6,000 Hz high-frequency roll-off.

The microphone shall be 95.6 mm (3.8") long and have a maximum diameter of 28.0 mm (1.1"). Weight shall be 138 g (4.9 oz). The microphone shall include a stand clamp and a soft protective pouch.

The Audio-Technica AE2300 is specified.

**Specifications**

Element	Dynamic
Polar pattern	Cardioid
Frequency response	60-20,000 Hz
High frequency roll-off	6,000 Hz, 6 dB/octave
Open circuit sensitivity	-57 dB (1.4 mV) re 1V at 1 Pa
Impedance	250 ohms
Switches	Flat, roll-off
Weight	138 g (4.9 oz)
Dimensions	95.6 mm (3.8") long, 28.0 mm (1.1") maximum diameter
Output connector	Integral 3-pin XLRM-type
Audio-Technica case style	S4
Accessories furnished	AT8471 isolation 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.

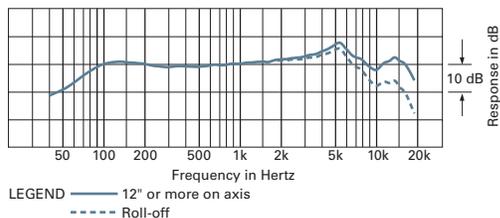
1 Pascal = 10 dynes/cm<sup>2</sup> = 10 microbars = 94 dB SPL

<sup>1</sup> Typical, A-weighted, using Audio Precision System One.

Specifications are subject to change without notice.



frequency response: 60–20,000 Hz



polar pattern

