# AE4100

## artist elite® live sound microphones

# Cardioid Dynamic Handheld Microphone



#### **Features**

- · Classic dynamic microphone sound with added vocal presence
- Optimized for the stage with excellent isolation properties
- The back-cavity assembly "floats" inside the handle shell, providing exceptional isolation from handling noise
- Cardioid polar pattern reduces pickup of sounds from the sides and rear, improving isolation of desired sound source
- Multi-stage grille design offers excellent protection against plosives and sibilance without compromising high-frequency clarity
- · Robust all-metal design for enduring dependability on the road
- Quiet-Flex<sup>™</sup> stand clamp provides silent, flexible microphone positioning

#### Description

The AE4100 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 grille design offers excellent protection against plosives and sibilance without compromising high-frequency clarity. The included AT8470 Quiet-Flex<sup>™</sup> stand clamp permits mounting on any microphone stand with <sup>5</sup>/s"-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 18,000 Hz. Nominal open-circuit output voltage shall be 1.7 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 177.0 mm (6.97") long and have a head diameter of 48.0 mm (1.89"). Weight shall be 310 grams (10.9 oz). The microphone shall include a stand clamp and a soft protective pouch.

The Audio-Technica AE4100 is specified.

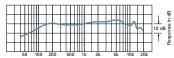
#### **Specifications**

| Element                   | Dynamic  |
|---------------------------|--|
| Polar pattern             | Cardioid   |
| Frequency response        | 90-18,000 Hz   |
| Open circuit sensitivity  | –55 dB (1.7 mV) re 1V at 1 Pa  |
| Impedance                 | 250 ohms   |
| Weight                    | 310 g (10.9 oz)  |
| Dimensions                | 177.0 mm (6.97") long,   |
|                           | 48.0 mm (1.89") head diameter  |
| Output connector          | Integral 3-pin XLRM-type   |
| Audio-Technica case style | T4   |
| Accessories furnished     | AT8470 Quiet-Flex <sup>™</sup> stand clamp for   |
|                           | <sup>5</sup> / <sub>8</sub> "-27 threaded stands; <sup>5</sup> / <sub>8</sub> "-27 to <sup>3</sup> / <sub>8</sub> "-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 Specifications are subject to change without notice.





frequency response: 90-18,000 Hz

Frequency i LEGEND \_\_\_\_\_\_ 12" or more on axis







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