# Hypercardioid Dynamic Handheld Microphone



#### **Features**

- · Assertive sound with excellent monitor cut
- · High output, fast transients and clean articulation
- Maximum feedback rejection
- The back-cavity assembly "floats" inside the handle shell, providing exceptional isolation from handling noise
- Hypercardioid polar pattern provides maximum feedback rejection and 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™ stand clamp provides silent, flexible microphone positioning

### Description

The AE6100 is a dynamic microphone with a hypercardioid polar pattern. It is designed specifically for close-up 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 grille design offers excellent protection against plosives and sibilance without compromising high-frequency clarity. The included AT8470 Quiet-Flex™ stand 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. 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.

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 60 Hz to 15,000 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 AE6100 is specified.

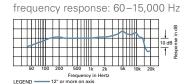
### **Specifications**

Element	Dynamic
Polar pattern	Hypercardioid
Frequency response	60-15,000 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™ 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/cm<sup>2</sup> = 10 microbars = 94 dB SPL Specifications are subject to change without notice.





polar pattern





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