

# AE2500 DUAL-ELEMENT CARDIOID MICROPHONE



- Revolutionary dual-element design features two elements (condenser and dynamic) enclosed in a single-housing
- Dynamic element delivers the aggressive attack of the beater while the condenser captures the round tonalities of the shell
- Elements are positioned in a perfect phase relationship, something practically unachievable with two separate microphones
- Robust design for enduring dependability on the road
- Integral 80 Hz HPF switch and 10 dB pad (condenser element)

The AE2500 is intended for use in professional applications where remote power is available. It requires 11V to 52V DC phantom power only to the condenser output of the supplied cable.

Output from the microphone's 5-pin XLRM-type connector is low-impedance (Lo-Z) balanced. The included 16.5' (5 m) shielded cable features a 5-pin XLRF-type input connector and two standard 3-pin XLRM-type output connectors. The balanced signals appear across Pins 2 and 3 (condenser) and Pins 4 and 5 (dynamic). Pin 1 is ground (shield). Output is phased so that positive acoustic pressure produces positive voltage at Pins 2 and 4.

To avoid phase cancellation and poor sound, all mic cables must be wired consistently: Pin 1-to-Pin 1, etc.

An integral 80 Hz hi-pass filter provides easy switching from a flat frequency response to a low-end roll-off. The roll-off position reduces the microphone's sensitivity to popping in close vocal use. It also reduces the pickup of low-frequency ambient noise (such as traffic, air-handling systems, etc.), room reverberation and mechanically-coupled vibrations.

The AE2500 includes an AT8471 isolation clamp to provide secure mounting, versatile positioning, and effective dampening of unwanted mechanical noise.

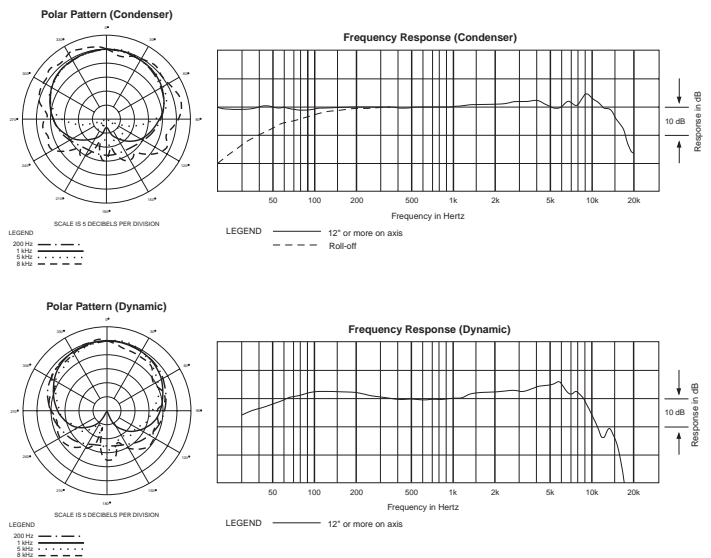
Avoid leaving the microphone in the open sun or in areas where temperatures exceed 110° F (43° C) for extended periods. Extremely high humidity should also be avoided. Take care to keep foreign particles from entering the windscreen. An accumulation of iron or steel filings on the diaphragm, and/or foreign material in the windscreen's mesh surface, can degrade performance.

## AE2500 SPECIFICATIONS†

<b>ELEMENTS</b>	Condenser, dynamic
<b>POLAR PATTERN</b>	Cardioid
<b>FREQUENCY RESPONSE</b>	20-17,000 Hz (condenser) 30-10,000 Hz (dynamic)
<b>LOW FREQUENCY ROLL-OFF</b>	80 Hz, 12 dB/octave (condenser)
<b>OPEN CIRCUIT SENSITIVITY</b>	-51 dB (2.8 mV) re 1V at 1 Pa* (condenser) -54 dB (1.9 mV) re 1V at 1 Pa* (dynamic)
<b>IMPEDANCE</b>	100 ohms (condenser) 600 ohms (dynamic)
<b>MAXIMUM INPUT SOUND LEVEL</b>	148 dB SPL, 1 kHz at 1% T.H.D. (condenser); 158 dB SPL, with 10 dB pad (nominal)
<b>DYNAMIC RANGE</b> (typical)	124 dB, 1 kHz at Max SPL (condenser)
<b>SIGNAL-TO-NOISE RATIO</b> <sup>1</sup>	70 dB, 1 kHz at 1 Pa* (condenser)
<b>PHANTOM POWER REQUIREMENTS</b>	11-52V DC, 3 mA typical (condenser)
<b>SWITCHES</b> (condenser only)	High-pass filter; 10 dB pad (nominal)
<b>WEIGHT</b> (less cable)	13.8 oz (390 g)
<b>DIMENSIONS</b>	6.50" (165.0 mm) long, 2.17" (55.0 mm) maximum diameter
<b>OUTPUT CONNECTOR</b>	Integral 5-pin XLRM-type
<b>CABLE</b>	16.5' (5 m) dual shielded, 8-conductor cable, 5-pin XLRF-type connector at microphone, two 3-pin XLRM-type output connectors
<b>ACCESSORIES FURNISHED</b>	AT8471 isolation 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.



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