

# AE5400 CARDIOID CONDENSER MICROPHONE



- Large-diaphragm element and true condenser design
- Superior anti-shock engineering ensures minimal handling noise
- Robust design for enduring dependability on the road
- Integral 80 Hz HPF switch and 10 dB pad
- Cardioid polar pattern reduces pickup of sounds from the sides and rear, improving isolation of desired sound source

The AE5400 is intended for use in professional applications where remote power is available. It requires 11V to 52V DC phantom power, which may be provided by a mixer or console, or by a separate, in-line source such as the Audio-Technica AT8801 single-channel or CP8506 four-channel phantom power supplies.

Output from the microphone's XLRM-type connector 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.

When using the AE5400 in settings with a stage monitor speaker, the speaker should be located 180° off axis (at 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.

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.

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.

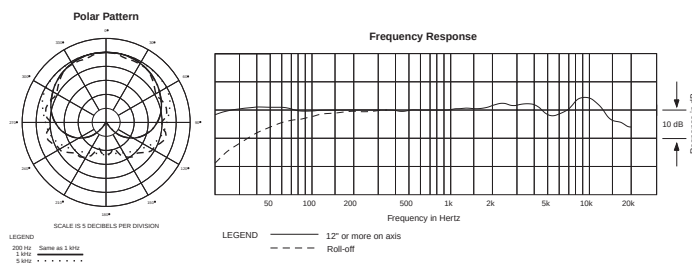
## AE5400 SPECIFICATIONS†

|                                          |                                                                                                                 |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| <b>ELEMENT</b>                           | Externally polarized (DC Bias) condenser                                                                        |
| <b>POLAR PATTERN</b>                     | Cardioid                                                                                                        |
| <b>FREQUENCY RESPONSE</b>                | 20-20,000 Hz                                                                                                    |
| <b>LOW FREQUENCY ROLL-OFF</b>            | 80 Hz, 12 dB/octave                                                                                             |
| <b>OPEN CIRCUIT SENSITIVITY</b>          | -40 dB (10.0 mV) re 1V at 1 Pa*                                                                                 |
| <b>IMPEDANCE</b>                         | 150 ohms                                                                                                        |
| <b>MAXIMUM INPUT SOUND LEVEL</b>         | 147 dB SPL, 1 kHz at 1% T.H.D.;<br>157 dB SPL, with 10 dB pad (nominal)                                         |
| <b>NOISE<sup>1</sup></b>                 | 14 dB SPL                                                                                                       |
| <b>DYNAMIC RANGE (typical)</b>           | 133 dB, 1 kHz at Max SPL                                                                                        |
| <b>SIGNAL-TO-NOISE RATIO<sup>1</sup></b> | 80 dB, 1 kHz at 1 Pa*                                                                                           |
| <b>PHANTOM POWER REQUIREMENTS</b>        | 11-52V DC, 4 mA typical                                                                                         |
| <b>SWITCHES</b>                          | High-pass filter;<br>10 dB pad (nominal)                                                                        |
| <b>WEIGHT (less accessories)</b>         | 11.6 oz (330 g)                                                                                                 |
| <b>DIMENSIONS</b>                        | 7.05" (179.0 mm) long, 1.97" (50.0 mm) head diameter, 1.30" to 0.87" (33.0 mm to 22.0 mm) tapered body diameter |
| <b>OUTPUT CONNECTOR</b>                  | Integral 3-pin XLRM-type                                                                                        |
| <b>ACCESSORIES FURNISHED</b>             | AT8470 Quiet-Flex™ stand clamp for 5/8"-27 threaded stands; 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.



## One-Year Limited Warranty

Audio-Technica brand products purchased in the U.S.A. are warranted for one year from date of purchase by Audio-Technica U.S., Inc. (A.T.U.S.) to be free of defects in materials and workmanship. In event of such defect, product will be repaired promptly without charge or, at our option, replaced with a new product of equal or superior value if delivered to A.T.U.S. or an Authorized Service Center, prepaid, together with the sales slip or other proof of purchase date. **Prior approval from A.T.U.S. is required for return.** This warranty excludes defects due to normal wear, abuse, shipping damage, or failure to use product in accordance with instructions. This warranty is void in the event of unauthorized repair or modification, or removal or defacing of the product labeling.

**For return approval and shipping information,** contact the Service Department, Audio-Technica U.S., Inc., 1221 Commerce Drive, Stow, Ohio 44224.

Except to the extent precluded by applicable state law, **A.T.U.S. will have no liability for any consequential, incidental, or special damages; any warranty of merchantability or fitness for particular purpose expires when this warranty expires.**

This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

Outside the U.S.A., please contact your local dealer for warranty details.



**audio-technica®**

**Audio-Technica U.S., Inc.,** 1221 Commerce Drive, Stow, Ohio 44224  
**Audio-Technica Limited,** Old Lane, Leeds LS11 8AG England  
[www.audio-technica.com](http://www.audio-technica.com)

P51451-EN ©2002 Audio-Technica U.S., Inc. Printed in Japan