

# AT4051a CARDIOID CONDENSER MICROPHONE

(4°) S E R I E S



## AT4051a 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>	-34 dB (19.9 mV) re 1V at 1 Pa*
<b>IMPEDANCE</b>	100 ohms
<b>MAXIMUM INPUT SOUND LEVEL</b>	146 dB SPL, 1 kHz at 1% T.H.D.
<b>NOISE<sup>1</sup></b>	19 dB SPL
<b>DYNAMIC RANGE (typical)</b>	127 dB, 1 kHz at Max SPL
<b>SIGNAL-TO-NOISE RATIO<sup>1</sup></b>	75 dB, 1 kHz at 1 Pa*
<b>PHANTOM POWER REQUIREMENTS</b>	48V DC, 3.2 mA typical
<b>SWITCH</b>	Flat, roll-off
<b>WEIGHT (less accessories)</b>	4.2 oz (120 g)
<b>DIMENSIONS</b>	6.10" (155.0 mm) long, 0.83" (21.0 mm) body diameter
<b>OUTPUT CONNECTOR</b>	Integral 3-pin XLRM-type
<b>ACCESSORIES FURNISHED</b>	AT8405 stand clamp for 5/8"-27 threaded stands; AT8159 windscreen; protective carrying case

†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.

- Specially engineered to meet the most critical acoustic requirements of professional recording, broadcast and sound reinforcement
- Direct-coupled, balanced output results in a clean signal even under high-output conditions
- Transformerless circuitry virtually eliminates low-frequency distortion and provides superior correlation of high-speed transients
- Rugged turned-brass microphone housing for enduring dependability
- State-of-the-art design and manufacturing techniques ensure compliance with A-T's stringent consistency and reliability standards

The AT4051a is intended for use in professional applications where remote power is available. It requires 48V 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 and CP8506 four-channel phantom power supplies.

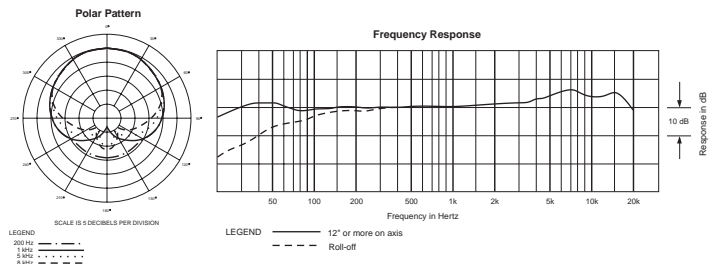
Output from the microphone's XLRM-type connector is low impedance (Lo-Z) balanced. The signal appears across Pins 2 and 3; Pin 1 is ground (shield). Output phase is "Pin 2 hot" – positive acoustic pressure produces positive voltage at Pin 2.

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

An integral 80 Hz high-pass filter provides easy switching from a flat frequency response to a low-end roll-off. The high-pass 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 AT4051a consists of two modular subassemblies: an AT4900a-48 body and an AT4051a-EL head capsule (both available separately). Additional interchangeable capsules are available in omnidirectional (AT4049a-EL) and hypercardioid (AT4053a-EL).

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.



### 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.



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