

# AT849 STEREO BOUNDARY MICROPHONE

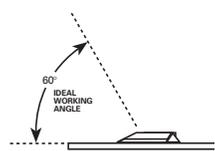


- Designed for surface-mount applications in broadcast, professional recording and sound reinforcement
- Low-profile design for minimum visibility
- Pair of closely-matched cardioid elements provides the spatial impact and realism of a live sound field
- The combination of a rugged die-cast case and rubber non-slip bottom pad minimizes mechanical coupling of surface vibrations to the microphone
- Switchable low-frequency roll-off

The AT849 requires 9V to 52V DC phantom power on each channel for operation.

Output for each stereo channel is low impedance (Lo-Z) balanced. The balanced signals of the TB5M output connector appear across Pins 2 and 3 for the left channel, Pins 4 and 5 for the right channel. Pin 1 is ground (shield) for both channels. Output is "Pins 2 and 4 hot" – positive acoustic pressure produces positive voltage at Pins 2 and 4.

The 3-pin XLRM cable connectors for the left and right channels are marked with gray and red bands, respectively. 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.



The symmetry and area of the mounting surface directly affect the sensitivity of the AT849 at low frequencies, as well as the overall stereo balance and image. The microphone should be centered on the surface and positioned with the microphone facing the sound source. The sound source should not be below, or higher than 60° above, the plane of the mounting surface.

Locating the AT849 nearer the sound source enhances the width of the stereo image, while decreasing room ambience. Conversely, as the mic position moves away from the sound source, a narrower left/right stereo image results and more of the "room sound" is noted.

The high sensitivity of the AT849 assures useful output and an excellent match to most inputs. However, the microphone's high output may overload some sensitive electronic input stages under some conditions. Many pre-amps and mixers include a mic pad or input attenuator control to prevent overload; or, use an AT8202 attenuator or equal at the input.

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.

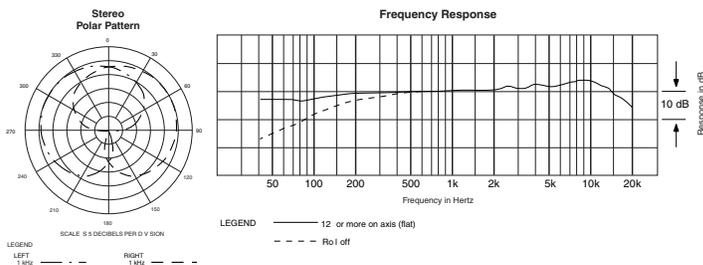
## AT849 SPECIFICATIONS†

<b>ELEMENTS</b>	Fixed-charge back plate permanently polarized condenser
<b>POLAR PATTERN</b>	X/Y stereo
<b>FREQUENCY RESPONSE</b>	30-20,000 Hz
<b>LOW FREQUENCY ROLL-OFF</b>	150 Hz, 6 dB/octave
<b>OPEN CIRCUIT SENSITIVITY</b>	-40 dB (10.0 mV) re 1V at 1 Pa*
<b>CHANNEL BALANCE</b>	≤ 2.5 dB
<b>IMPEDANCE</b>	200 ohms balanced
<b>MAXIMUM INPUT SOUND LEVEL</b>	137 dB SPL, 1 kHz at 1% T.H.D.
<b>SIGNAL-TO-NOISE RATIO<sup>1</sup></b>	67 dB, 1 kHz at 1 Pa*
<b>DYNAMIC RANGE (typical)</b>	110 dB, 1 kHz at Max SPL
<b>PHANTOM POWER REQUIREMENTS</b>	9-52V DC, 2 mA typical (each channel)
<b>SWITCH</b>	Flat, roll-off
<b>WEIGHT (less cable and accessory)</b>	5.3 oz (149 grams)
<b>DIMENSIONS</b>	3.62" (92.0 mm) maximum length, 2.87" (73.0 mm) maximum width
<b>OUTPUT CONNECTOR</b>	Integral 5-pin TB5M
<b>CABLE</b>	25' (7.6 m) long, shielded, vinyl-jacketed, stereo cable with 5-pin TA5F connector at microphone end, two 3-pin XLRM-type connectors at output end
<b>ACCESSORY FURNISHED</b>	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.



**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)