

# AT831R MINIATURE CARDIOID CONDENSER MICROPHONE



- Clip-on lavalier mic provides crisp, full-sounding voice pickup
- Also excels as an instrument mic, especially for pickup of acoustic guitar with included AT8444 guitar adapter
- Ideal for higher SPL applications, such as pickup for horns with included AT8418 UniMount® microphone instrument mount
- Excellent gain before feedback and suppression of background noise
- Operates on phantom power only

For use as a lavalier, attach the microphone about six inches below the chin. Anticipate movements that may cause the microphone to rub against or be covered by clothing, and position the microphone to avoid it.

The AT831R is intended for use in professional applications where remote power is available. It requires 9 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 power module'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.

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.

## AT831R SPECIFICATIONS†

|  |  |
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| <b>ELEMENT</b>                             | Fixed-charge back plate permanently polarized condenser  |
| <b>POLAR PATTERN</b>                       | Cardioid   |
| <b>FREQUENCY RESPONSE</b>                  | 40-20,000 Hz   |
| <b>OPEN CIRCUIT SENSITIVITY</b>            | -42 dB (7.9 mV) re 1V at 1 Pa*   |
| <b>IMPEDANCE</b>                           | 200 ohms   |
| <b>MAXIMUM INPUT SOUND LEVEL</b>           | 141 dB SPL, 1 kHz at 1% T.H.D.   |
| <b>DYNAMIC RANGE</b> (typical)             | 112 dB, 1 kHz at Max SPL   |
| <b>SIGNAL-TO-NOISE RATIO</b> †             | 65 dB, 1 kHz at 1 Pa*  |
| <b>PHANTOM POWER REQUIREMENTS</b>          | 9-52V DC, 2 mA typical   |
| <b>WEIGHT</b> (less cable and accessories) |  |
| <b>MICROPHONE</b>                          | 0.1 oz (2.8 g)   |
| <b>POWER MODULE</b>                        | 1.8 oz (51.4 g)  |
| <b>DIMENSIONS</b>                          |  |
| <b>MICROPHONE</b>                          | 0.98" (24.8 mm) long, 0.40" (10.2 mm) diameter   |
| <b>POWER MODULE</b>                        | 3.13" (79.5 mm) long, 0.83" (21.0 mm) diameter   |
| <b>OUTPUT CONNECTOR</b><br>(power module)  | Integral 3-pin XLRM-type   |
| <b>CABLE</b>                               | 25' (7.6 m) long (permanently attached to microphone), 0.13" (3.2 mm) diameter, 2-conductor, shielded cable with TA3F output connector |

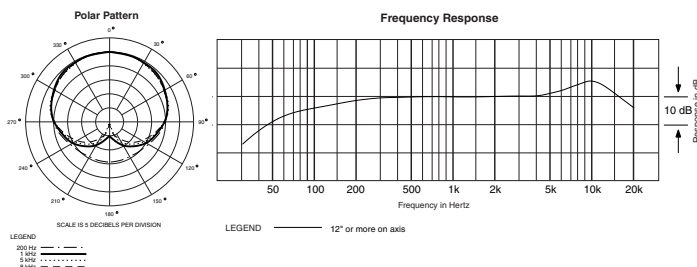
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|------------------------------|--|
| <b>ACCESSORIES FURNISHED</b> | AT8417 clothing clip;<br>AT8418 UniMount® microphone instrument mount;<br>AT8444 guitar adapter;<br>AT8533 remote power module;<br>AT8116 windscreen; protective carrying case |
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†In 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

† Typical, A-weighted, using Audio Precision System One.

Specifications are subject to change without notice.



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