

# AT831R

## MINATURE 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 instrument adapter
- Excellent gain before feedback and suppression of background noise
- UniSteep® filter provides a steep low-frequency attenuation to improve sound pickup without affecting voice quality
- 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 11 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.

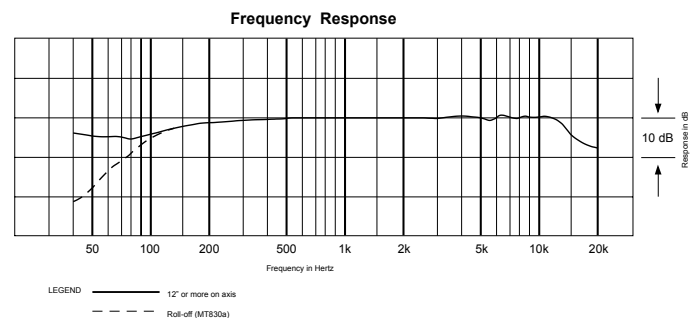
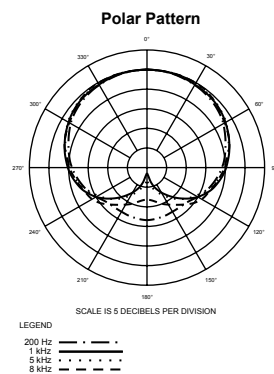
An integral 80 Hz high-pass UniSteep® filter provides easy switching from a flat frequency response to a low-end roll-off. The roll-off position reduces the microphone's sensitivity to popping in close vocal use. It also reduces the pickup of low-frequency ambient noise (such as traffic, air-handling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

The microphone is RoHS compliant—free from all substances specified in the EU directive on hazardous substances.

Avoid leaving the microphone in the open sun or in areas where temperatures exceed 43°C for extended periods. Extremely high humidity should also be avoided.

### SPECIFICATIONS

<b>ELEMENT</b>	Fixed-charge back plate permanently polarized condenser
<b>POLAR PATTERN</b>	Cardioid
<b>FREQUENCY RESPONSE</b>	40-16,000 Hz
<b>OPEN CIRCUIT SENSITIVITY</b>	-42 dB (7.9 mV) re 1V at 1 Pa
<b>IMPEDANCE</b>	250 ohms
<b>MAXIMUM INPUT SOUND LEVEL</b>	141 dB SPL, 1 kHz at 1% T.H.D.
<b>LOW FREQUENCY ROLL-OFF</b>	80 Hz, 18 dB/octave
<b>DYNAMIC RANGE (typical)</b>	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>	11-52V DC, 2 mA typical
<b>SWITCH</b>	Flat, roll-off
<b>WEIGHT (less cable and accessories)</b>	
<b>MICROPHONE</b>	2.8 g
<b>POWER MODULE</b>	81 g
<b>DIMENSIONS</b>	
<b>MICROPHONE</b>	25.0 mm - long, 10.2 mm - diameter
<b>POWER MODULE</b>	92.9 mm - long, 18.9 mm - diameter
<b>OUTPUT CONNECTOR</b>	Integral 3-pin XLRM-type
<b>CABLE</b>	4.0 m long (permanently attached to microphone), 3.2 mm diameter, 2-conductor, shielded cable with TA3F output connector
<b>ACCESSORIES FURNISHED</b>	AT8538 power module; AT8417 clothing clip; AT8444 instrument adapter; AT8116 windscreens; protective carrying case



# AT831R

## 小型心形指向性话筒



- 领带式小型话筒，提供清脆明亮和全音域的话音收音功能。
- 可使用在乐器收音上，配置AT8444结他夹持装置，可把话筒夹持在准确的收音位置，并能保护收音头及减低震动。
- 在增益收音的同时，仍有优秀的抗回音和减少背景噪音能力。
- UniSteep® - 高通滤波器，提供了一个高效能的高通滤波，把低频噪声作出衰减而无损话音的收音质量。
- 使用幻象供电工作。

AT831R 是为戴在表演者衣服、领带上，在不妨碍外观，但有超卓收音效果而设计的超小型电容话筒。佩戴在领带时，请注意把话筒夹持于颈下约150mm的位置。而为避免衣服碰到话筒时产生的噪音，请注意话筒夹持的位置不要接触到其他衣服。

配有一个 AT8538 供电模组，需要提供11V至52V幻象供电，可使用调音台上的幻象电源，也可以使用铁三角的 AT8801 单通道或 AT8506 四通道幻象电源供电作独立供电。

供电模组的XLR卡农输出端为低阻抗平衡输出，话筒音频信号最终以卡农公头的2号及3号针脚输出，而1号针脚则为地线(屏蔽)连接。输出相位将以正相位电平设于2号针脚上。

为避免出现相位相互抵消而失真的情况，所有话筒连接时，接线必需以1-1, 2-2, 3-3型式把针脚连接。

内置高质量 UniSteep® 高通滤波电路，可轻易由平直的频率响应，开启为于80 Hz以下衰减的收音效果，应高通滤波器可减低话筒在近距离讲话收音时的喷气声，并可减低收音环境中低频噪声(如外间汽车引擎声，空调系统的风声等)，房间中的回声及机械性的震动声。

话筒符合RoHS规格，在构造上不含有欧盟禁用的危害性物质。

把话筒暴露于高温中可能导致输出电平逐渐及永久性减弱，应避免将话筒留在日晒的地方或长时间置于温度超过43°C的地方，而极高湿度也应避免。

### 技术指标

收音头	固定充电背板，静电型电容式
指向特性	心型指向性
频率响应	40-16,000 Hz
开通灵敏度	-42 dB (7.9 mV) 以 1V 于 1 Pa
输出阻抗	250 欧姆
最大输入声压	141 dB SPL, 1 kHz 于 1% T.H.D
高通滤波	80 Hz, 18 dB/octave
动态范围(典型)	112 dB, 1 kHz 于最高声压
讯噪比	65 dB, 1V 于 1 Pa
幻象供电	直流 11-52V, 耗电 2 mA 典型
开关	平直, 高通滤波

### 重量(不带连线与配件)

话筒	2.8 克
供电模组	81 克

### 外形尺寸

话筒	25.0 mm -长, 10.2 mm -直径
供电模组	92.9 mm -长, 18.9 mm -直径

### 输出连接器

内置 XLRM-3针卡农公头

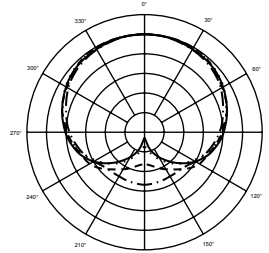
### 连线

4.0 m - 长, 3.2 mm - 直径,  
话筒固定连接,  
2蕊线连屏蔽电线, 以TA3F插头连接。

### 附属品

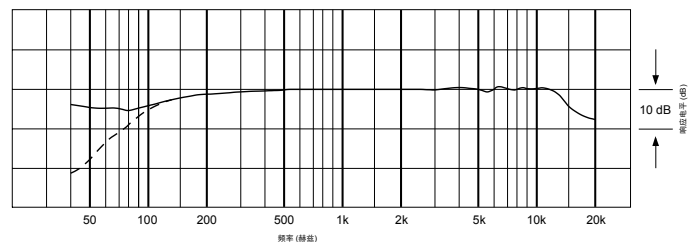
AT8538 供电模组;  
AT8417 领带夹;  
AT8444 乐器夹持装置;  
AT8116 防风罩;  
便携保护袋。

指向特性



声压曲线1刻度5 dB  
频率  
200 Hz  
1 kHz  
5 kHz  
8 kHz

频率特性



电平  
—— 平直  
- - - - 高通滤波 (MTS30a)



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