

AT8031

CARDIOID CONDENSER MICROPHONE



- All-purpose condenser microphone ideal for interviews, voice-overs, air studio and general audio acquisition
- Cardioid polar pattern reduces pickup of sounds from the sides and rear, improving isolation of desired sound source
- Switchable 80 Hz high-pass filter minimizes pickup of undesired low-frequency sounds
- Large protective screen reduces "popping" and sibilant distortion
- Operates on battery or phantom power

The AT8031 requires 11V to 52V DC phantom power or a 1.5V AA battery for operation. A battery need not be in place for phantom power operation.

Battery installation: Unscrew the lower section of the microphone body, just below the nameplate. Insert a fresh 1.5V AA battery in the handle compartment ("+" end up), then reassemble the microphone. Alkaline batteries are recommended for longest life. Remove the battery during long-term storage.

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 roll-off position reduces the pickup of low-frequency ambient noise (such as traffic, air-handling systems, etc.), room reverberation and mechanically coupled vibrations.

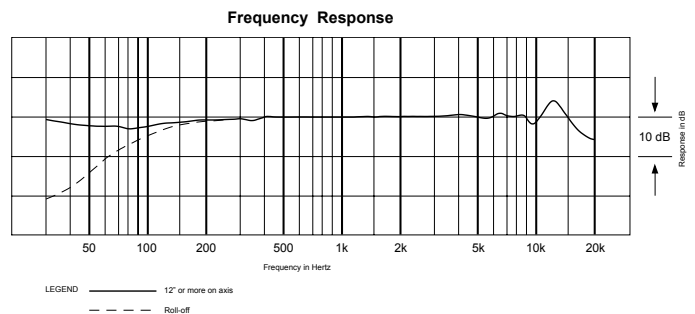
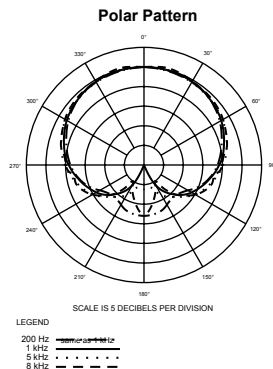
The high sensitivity of the AT8031 assures useful output and an excellent match to most input sources. In some cases, however, an attenuator such as the Audio-Technica AT8202 may be required between the microphone and preamplifier to avoid overloading sensitive input stages.

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

ELEMENT	Fixed-charge back plate permanently polarized condenser
POLAR PATTERN	Cardioid
FREQUENCY RESPONSE	30-20,000 Hz
LOW FREQUENCY ROLL-OFF	80 Hz, 12 dB/octave
OPEN CIRCUIT SENSITIVITY (Phantom / Battery)	-44 dB (6.3 mV) re 1V at 1 Pa -45 dB (5.6 mV) re 1V at 1 Pa
IMPEDANCE (Phantom / Battery)	250 ohms / 300 ohms
MAXIMUM INPUT SOUND LEVEL (Phantom / Battery)	137 dB / 123 dB SPL, 1 kHz at 1% T.H.D.
DYNAMIC RANGE (typical) (Phantom / Battery)	113 dB / 99 dB, 1 kHz at Max SPL
SIGNAL-TO-NOISE RATIO	70 dB, 1 kHz at 1 Pa
PHANTOM POWER REQUIREMENTS	11 - 52V DC, 2 mA typical
BATTERY TYPE	1.5V AA/UM3
BATTERY CURRENT / LIFE	0.4 mA / 1200 hrs typical (alkaline)
SWITCHES	Flat, roll-off
WEIGHT (less cable and accessories)	205 g
DIMENSIONS	193.0 mm long, 50.3 mm head diameter
OUTPUT CONNECTOR	Integral 3-pin XLRM-type
ACCESSORIES FURNISHED	AT8405a stand clamp for 5/8"-27 threaded stands; AT8114 windscreen; 5/8"-27 to 3/8"-16 threaded adapter; battery; soft protective pouch

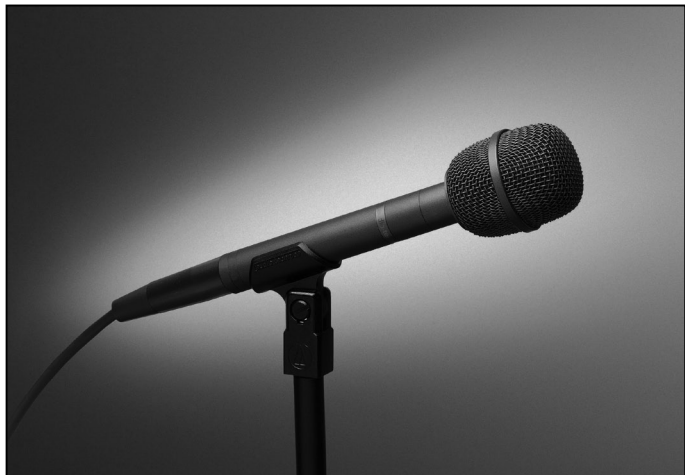


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AT8031

心形指向性电容话筒



- 适合于采访、讲话、播音和一般音频收音等，多方面应用的电容话筒。
- 心形指向性收音，可减低话筒两旁到后方的噪音，改善音源收音效果。
- 设有80Hz高通滤波开关，有效降低环境中低频噪声。
- 大型防风保护罩，可减低喷气声和齿声失真。
- 可以使用电池或幻象供电工作。

AT8031话筒需使用11V至52V幻象供电或1.5V AA电池工作，当使用幻象电源时，可以不安装电池。

安装电池时，旋开话筒底部的电池盖，确认电池的极性(跟随电池盒内的标记)，放入一枚新的1.5V AA电池('+'极向上)，再旋回电池盖。建议使用碱性电池，而长时间不使用时，请把电池取出。

话筒的XLRM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。

内置高通滤波电路，可轻易由平直的频率响应，开启为于80Hz以下衰减的收音效果，应用高通滤波器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。

AT8031提供高灵敏度的收音效能，可确保能接收到最大的音源。而在某些情况下，为避免发生超负载输入而出现破声情况，需要在话筒和前置放大器之间加入AT8202等的电平衰减器。

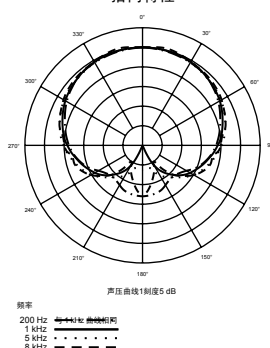
话筒符合RoHS规格，在构造上不含有欧盟禁用的危害性物质。

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	心形指向性
频率响应	30-20,000 Hz
高通滤波	80 Hz, 12 dB/octave
开通灵敏度	(幻象供电) -44 dB (6.3 mV) / (电池) -45 dB (5.6 mV) 以 1V 于 1 Pa
输出阻抗	(幻象供电/电池) 250 欧姆 / 300 欧姆
最大承受声压	(幻象供电/电池) 137 dB / 123 dB 声压， 1 kHz 于 1% T.H.D.
动态范围 (典型)	(幻象供电/电池) 113 dB / 99 dB, 1 kHz 于最高声压
讯噪比	70 dB, 1 kHz 于 1 Pa
电池种类	1.5V AA型 5号电池
耗电/电池寿命	0.4 mA / 1200小时 (碱性电池)
幻象供电	直流 11 - 52V, 耗电 2mA 典型
开关	平直 / 高通滤波
重量	205 g
外形尺寸	193.0 mm 长, 50.3 mm 最大外径
输出连接器	内置 XLRM-3针卡农公头
附属品	AT8405a 5/8"-27接头转轴式支架; AT8114 防风罩; 5/8"-27至3/8"-16转接头; 电池; 保护袋

指向特性



频率特性

