AT4021

(40) SERIES

CARDIOID CONDENSER MICROPHONE

- Outstanding performance and rugged construction, ideal for critical studio & live applications

- High SPL handling and wide dynamic range

- Flat, extended frequency response

- Switchable 80 Hz hi-pass filter and 10 dB pad

- High front-to-back rejection ratio – cardioid polar pattern improves isolation of desired sound source

- Low self-noise perfectly suited for digital recording equipment

- Exceptional reproduction of low-frequency sounds

- Low-mass element for superb transient response

The AT4021 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 or AT8506 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.

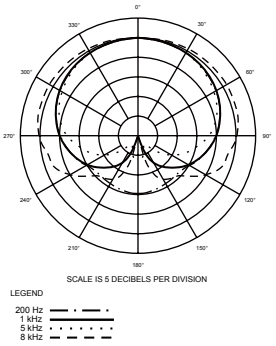
An integral 80 Hz hi-pass filter provides easy switching from a flat frequency response to a low-end roll-off. The roll-off position reduces the microphone's sensitivity to popping in close vocal use. It also reduces the pickup of low-frequency ambient noise (such as traffic, air-handling systems, etc.),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

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	20-20,000 Hz
OPEN CIRCUIT SENSITIVITY	-34 dB (19.9 mV) re 1V at 1 Pa
IMPEDANCE	250 ohms
MAXIMUM INPUT SOUND LEVEL	146 dB SPL, 1 kHz at 1% T.H.D. 156 dB SPL, with 10 dB pad (normal)
NOISE	14 dB SPL
DYNAMIC RANGE (typical)	132 dB, 1 kHz at Max SPL
SIGNAL-TO-NOISE RATIO	80 dB, 1 kHz at 1Pa
LOW FREQUENCY ROLL-OFF	80 Hz, 12 dB/octave
PHANTOM POWER REQUIREMENTS	48V DC, 3.0 mA typical
WEIGHT (less accessories)	119 g
DIMENSIONS	144.0 mm - long, 21.0 mm - body diameter
OUTPUT CONNECTOR	Integral 3-pin XLRM-type
ACCESSORIES FURNISHED	AT8405a snap-in clamp for ⅝"-27 threaded stand; windscreen; protective carrying case

Polar Pattern

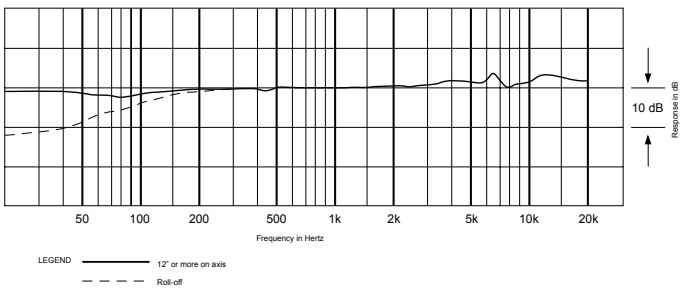


Optional Accessories:

AT8506 four-channel 48V phantom power supply (AC powered).

AT8801/EU single-channel 48V phantom power supply (AC powered).

Frequency Response



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FORM No. ATGC-L0145-08-E

AT4021

(40) SERIES

心形指向性电容话筒

- 良好的表现和坚固的结构，适合于录音室和现场收音的应用。

- 可处理高声压电平，提供更大的动态范围。

- 平滑而伸展的频率响应。

- 设有80Hz高通滤波开及10dB衰减。

- 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。

- 低噪声结构，完全合适于高级数字录音设备。

- 增强对低频响应的重现。

- 轻重收音头设计，可提供更大的瞬间响应。

AT4021需要使用48V幻象供电工作，可使用专业调音台上的幻象电源，也可以使用鐵三角的AT8801单通道或AT8506四通道幻象电源供电器作独立供电。

低阻抗的平衡音频输出，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。

为澫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。

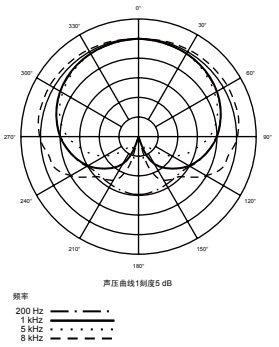
内置高通滤波电路，可轻易由平直的频率响应，开启为于80 Hz以下衰减的收音效果，应用高通滤波器可减低话筒在近距离讲话收音时的喷气声，并可减低收音环境中低频噪声(如外间汔车引擎声，空调系统的风声等)，房间中的回声及机械性的震动声。

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	直流偏压型电容式
指向特性	心形指向性
频率响应	20-20,000 Hz
开通灵敏度	-34 dB (19.9 mV) 以 1V 于 1 Pa
输出阻抗	250 欧姆
最大承受声压	146 dB, 1 kHz 于 1% T.H.D. 156 dB, 于 10 dB 衰减
噪声	14 dB 声压
动态范围 （典型）	132 dB, 1 kHz 于最高声压
讯噪比	80 dB, 1 kHz 于 1Pa
高通滤波	80 Hz, 12 dB/octave
幻象供电	直流 48V，耗电 3.0 mA 典型
重量	119 克
外形尺寸	144.0 mm - 长度, 21.0 mm - 直径
输出连接器	内置 XLRM-3针卡农公头
附属品	AT8405a ⅝”-27接头转轴式支架， 保護袋，海棉防风罩。

指向特性

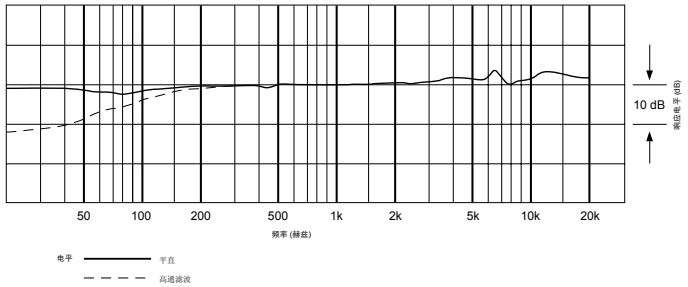


选择配件:

AT8506 四通道48V幻象供电器 (交流供电)。

AT8801/EU 单通道48V幻象供电器 (交流供电)。

频率特性



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