

AT2031

Cardioid Condenser End-Address Microphone



Features

- Outstanding performance and rugged construction
- High SPL handling and wide dynamic range
- Smooth, extended frequency response with a slight rise in the high-frequency region
- Switchable 150 Hz 6dB/oct hi-pass filter
- Cardioid polar pattern improves isolation of desired sound source
- Low self noise perfectly suited for digital recording equipment
- Ideal for stringed instruments such as Violin, Cello, Acoustic Guitar, Harp and Piano

Description

The AT2031 is the ideal microphone for stringed instruments in critical studio and live applications. Its permanently polarized element offers extended frequency response with a slight rise in the high frequency range for a more detailed sound. Its low self-noise and high SPL handling capability offer a wide dynamic range, perfectly suited for the most demanding applications.

Operation and Maintenance

The AT2031 requires 48V phantom power for operation.

Output 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.

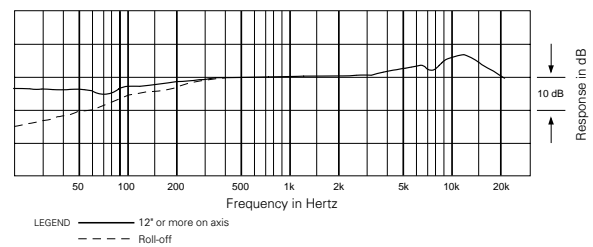
An integral 150 Hz high-pass filter provides easy switching from a flat frequency response to a low-end roll-off. The roll-off position reduces the pickup of low-frequency ambient noise (such as traffic, air-handling systems, etc.), room reverberation and mechanically coupled vibrations. To engage the high-pass filter, slide the switch toward the "bent" line.

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.

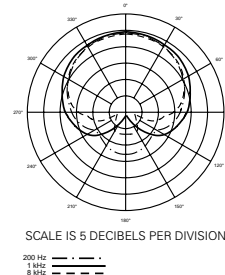
Specifications

| | |
|-----------------------------------|--|
| Element | Fixed-charge back plate, permanently polarized condenser |
| Polar pattern | Cardioid |
| Frequency response | 20-20,000 Hz |
| Low frequency roll-off | 150 Hz, 6 dB/octave |
| Open circuit sensitivity | -34 dB (19.9 mV) re 1V at 1 Pa |
| Impedance | 85 ohms |
| Maximum input sound level | 141 dB SPL, 1 kHz at 3% T.H.D. |
| Noise | 17 dB SPL |
| Dynamic range (typical) | 124 dB, 1 kHz at Max SPL |
| Signal-to-noise ratio | 77 dB, 1 kHz at 1 Pa |
| Phantom power requirements | 48V DC, 2 mA typical |
| Switch | Flat, roll-off |
| Weight | 134 g |
| Dimensions | 143.0 mm long, 21.0 mm max. body diameter |
| Output connector | Integral 3-pin XLRM-type |
| Accessories furnished | AT8405a stand clamp; windscreen; soft protective pouch |

frequency response: 20–20,000 Hz



polar pattern



AT2031

心形指向性前端收音式电容话筒

20 SERIES



特性

- 卓越的表现和坚固的结构
- 能承受高声压及有宽阔的动态范围
- 平滑并有更扩展的频率响应，在高频音域有更好的提升
- 开关式 150Hz 6dB/oct 的高通滤波
- 心形指向性设计，能提高收音目标的隔离度
- 更低的底噪声性能，非常适合数码录音设备使用
- 是小提琴，大提琴，木吉他，竖琴和钢琴等弦乐的理想收音选择

说明

AT2031是在高级录音室和现场弦乐收音应用的理想话筒。其永久极化的收音头，提供了具扩展频率响应以及高频音域提升中，有更细致音色。低底噪声和高声压级处理的能力，提供了一个宽广的动态范围，非常适合于严格要求的应用。

操作与维护

AT2031 话筒需要以48V幻象供电工作。

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。

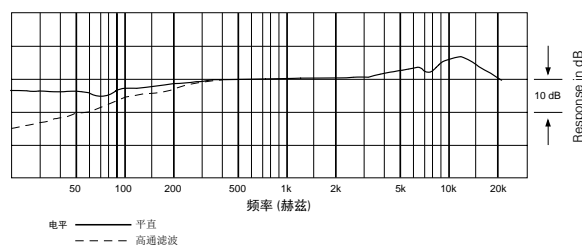
内置高通滤波电路，可轻易由平直的频率响应，开启为于150 Hz 以下衰减的收音效果，应用高通滤波器可减低话筒在近距离讲话收音时的喷气声，并可减低收音环境中低频噪声(如外间汽车引擎声，空调系统的风声等)，房间中的回声及机械性的震动声。若需要启用高通滤波，可将开关拨至“弯曲”图像行。

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 | 20-20,000 Hz |
| 高通滤波 | 150 Hz, 6 dB/octave |
| 开通灵敏度 | -34 dB (19.9 mV) 以 1V 于 1 Pa |
| 阻抗 | 85 欧姆 |
| 最高承受声压 | 141 dB 声压级, 1 kHz 于 3% T.H.D. |
| 噪声 | 17 dB 声压级 |
| 动态范围 (典型) | 88 dB, 1 kHz 于最高声压级 |
| 讯噪比 | 77 dB, 1 kHz 于 1 Pa |
| 幻象供电 | 直流 48V, 耗电 2 mA 典型 |
| 开关 | 平直, 高通滤波 |
| 重量 | 134 克 |
| 外形尺寸 | 长 143.0 mm, 机身最大直径 21.0 mm |
| 输出端子 | 内置式 3 针卡农公头 |
| 标准配置 | AT8405a 话筒夹; 防风罩; 保护袋 |

频率响应: 20-20,000 Hz



指向特性

