



User Manual

Cardioid Condenser Instrument Microphone AE5100

audio-technica



Thank you for purchasing this product. Before using the product, read through the user manual to ensure that you will use the product correctly. Please keep this manual for future reference.

Features

- Uncompromising sound quality for overheads, percussion, acoustic guitar, strings and other acoustic instruments
- Large-diaphragm capsule delivers accurate and natural response
- Low-profile design permits innovative placement options previously unattainable with a large-diaphragm condenser
- Robust design for enduring dependability on the road
- Integral 80 Hz HPF switch and 10 dB pad
- Cardioid polar pattern reduces pickup of sounds from the sides and rear, improving isolation of desired sound source

Notes on use

The AE5100 is intended for use in professional applications where remote power is available. It requires 11V 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 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.

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.

The AE5100 includes an AT8471 isolation clamp to provide secure mounting, versatile positioning, and effective dampening of unwanted mechanical noise.

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.

Safety precaution

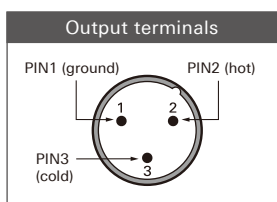
Although this product was designed to be used safely, failing to use it correctly may result in an accident. To ensure safety, observe all warnings and cautions while using the product.

Cautions for the product

- Do not subject the product to strong impact to avoid malfunction.
- Do not disassemble, modify or attempt to repair the product.
- Do not handle the product with wet hands to avoid electric shock or injury.
- Do not store the product under direct sunlight, near heating devices or in a hot, humid or dusty place.

Connection procedure

Connect the output terminals of the microphone to a device that has a microphone input (balanced input) compatible with a phantom power supply. The output connector is an XLRM-type with polarity as shown in the figure below.



This product requires 48 V DC phantom power.

Specifications

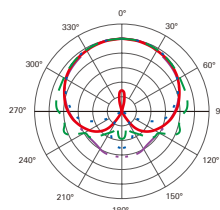
Element	Fixed-charge back plate, permanently polarized condenser
Polar pattern	Cardioid
Frequency response	20 - 20,000 Hz
Low Frequency response	80 Hz, 12 dB/octave
Open circuit sensitivity	-36 dB (15.8 mV) re 1V at 1 Pa
Impedance	150 ohms
Maximum input sound level	148 dB SPL, 1 kHz at 1% T.H.D. 158 dB SPL, with 10 dB pad (normal)
Noise	11 dB SPL
Dynamic range (typical)	137 dB, 1 kHz at Max SPL
Signal-to-noise ratio	83 dB, 1 kHz at 1 Pa
Phantom power requirements	11-52 V DC, 3.2 mA typical
Switch	High-pass filter, 10 dB pad (normal)
Weight (less accessories)	143 g
Dimensions	148.5 mm long, 26.0 mm maximum diameter
Output connector	Integral 3-pin XLRM-type
Included accessories	AT8471 isolation clamp for 5/8"-27 threaded stands; 5/8"-27 to 3/8"-16 threaded adapter; AT8136 windscreen; soft protective pouch

• 1 Pascal = 10 dynes/cm² = 10 microbars = 94 dB SPL

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

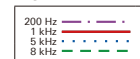
For product improvement, the product is subject to modification without notice.

Polar pattern

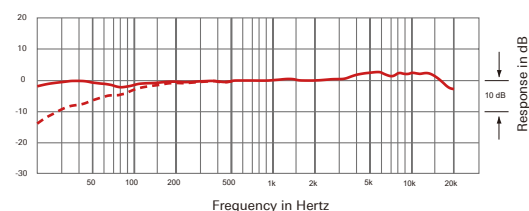


SCALE IS 5 DECIBELS PER DIVISION

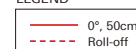
LEGEND



Frequency response



LEGEND



Audio-Technica Corporation

2-46-1 Nishi-naruse, Machida, Tokyo 194-8666, Japan

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感谢您购买本产品。在使用产品之前，请全文浏览本用户手册以确保您将正确地使用本产品。请妥善保管本手册，以供将来参考。

产品特点

- 对敲击乐器、原声结他、弦乐器及其他演奏乐器均有杰出的收音质量
- 大型振膜电容收音头提供实而不华及非常自然的收音响应
- 以创新配置技术，将大型振膜装置到小型外壳中，是以往技术难以做到的效果
- 坚固的金属结构，可确保在现场演出使用时的可靠性
- 内置 80Hz 高通滤波器及 10dB 衰减
- 心形指向性设计，减低旁边及后方的噪声干扰，提高收音目标的隔离度

使用注意事项

AE5100 适合于使用远程供电的专业应用，其可以由调音台或混音器提供 11V 至 52V 的直流幻象电源，也可以由单独的串联供电器提供电源，例如铁三角的 AT8801 单通道供电器或 CP8506 四通道幻象电源供电器。

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。

内置低截滤波电路，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，应用低截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。

AE5100 附属的 AT8471 防震话筒夹配有 5/8"-27 螺纹，可牢固安装在任何话筒支架中，提供多功能定位，并有效阻隔的机械噪音。

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。

安全预防措施

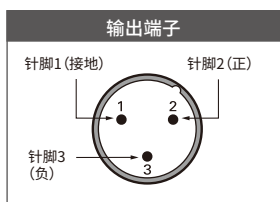
虽然本产品采用安全设计，但使用不当仍可能发生事故。为了确保安全，使用本产品时请注意全部警告和提醒。

本产品注意事项

- 切勿让本产品遭受强烈冲击，以避免发生故障。
- 切勿拆开、改装或尝试维修本产品。
- 切勿用湿手握持本产品，以免触电或受伤。
- 切勿将本产品存放在阳光直射的地方、加热装置附近或者炎热、潮湿或多尘的地方。

连接步骤

将话筒的输出端子连接到具有兼容幻象电源的话筒输入（平衡输入）的设备。输出接口是 XLRM 型接口，其极性如下图所示。



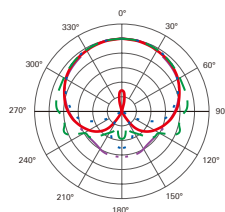
本产品使用直流 48V 幻象电源。

规格

元件	固定充电背板，静电型电容式
指向性	心形指向性
频率响应	20 - 20,000 Hz
高通滤波	80 Hz, 12 dB/octave
开路灵敏度	-36 dB (15.8mV) 以 1V 于 1Pa
输出阻抗	150 欧姆
最大承受声压	148 dB 声压, 1 kHz 于 1% T.H.D. 158 dB 声压, 于 10 dB 衰减 (正常)
噪声	11 dB 声压
动态范围 (典型)	137 dB, 1 kHz 于最高声压
信噪比	83 dB, 1 kHz 于 1 Pa
幻象供电	直流 11-52V, 3.2mA 典型
开关	低截滤波, 10 dB 衰减
重量 (不含配件)	143 克
尺寸	长度 148.5 mm, 最大直径 26.0 mm
输出端子	内置式 3 针卡农公头
附带配件	AT8471 防震式 5/8"-27 接头话筒夹; 5/8"-27 至 3/8"-16 转接头、 AT8136 防风罩、保護袋

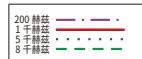
* 1 帕 = 10 达因 / 平方厘米 = 10 微巴 = 94 dB SPL
* 典型, A 计权, 使用 Audio Precision System One
因产品改进, 本产品会随时改装, 恕不另行通知。

指向性

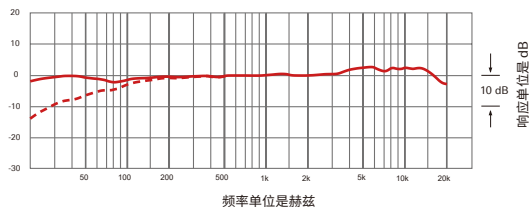


比例是每分贝 5 分贝

图例



频率响应



图例

— 0°, 50 厘米

- - - 高通滤波