

ES938aH

engineeredsound®

HYPERCARDIOID CONDENSER GOOSENECK MICROPHONE



ES938aH is a wide-range miniature condenser microphone with a hypercardioid polar pattern. It is designed for quality sound reinforcement, professional recording, television and other demanding sound pickup applications. The small-diameter double gooseneck design permits highly flexible positioning while maintaining a smooth, wellcontoured appearance. An included snap-on foam windscreen effectively reduces wind noise and "popping."

The ES938aH is equipped with metallicity for aerospace and UniGuard® RFI-shielding technology, which offers good performance for the voice pickup of asian and outstanding rejection of radio frequency interference (RFI). The microphone is RoHS compliant – free from all substances specified in the EU directive on hazardous substances.

The microphone's hypercardioid polar pattern provides a 100° angle of acceptance. Additional interchangeable elements with omnidirectional (360°), cardioid (120°) and MicroLine® (90°) pickup patterns are available.

The integral power module can be powered from any external 11V to 52V DC phantom power supply. A recessed switch in the power module permits choice of flat response or low-frequency roll-off (via integral 80 Hz high-pass UniSteep® filter) to help control undesired ambient noise.

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The microphone is enclosed in a rugged housing with a low-reflectance black finish. It features an XLRM-type connector insert at its base, allowing it to be plugged directly into an XLRF-type panel jack or microphone cable. An AT8474 low-profile isolation mount or AT8473 stand clamp is optional to permit attachment of the XLR mic base to a standard 5/8"-27 or 3/8"-16 threaded mic stand or mounting flange.

The ES938aH stands 457.2 mm from the table or podium. The model output is low impedance balanced. The output connector mates with XLRF-type cable connectors. The balanced signal appears across Pins 2 and 3, while the ground (shield) connection is Pin 1. Output is phased so that positive acoustic pressure produces positive voltage at Pin 2, in accordance with industry convention.

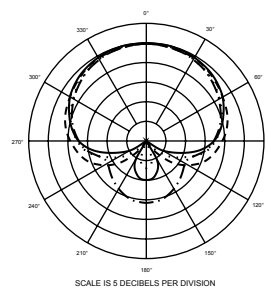
The integral 90 Hz high-pass UniSteep® filter provides easy switching from a flat frequency response to a low-end roll-off. The roll-off position reduces the pickup of low-frequency ambient noise (such as traffic, airhandling systems, etc.), room reverberation and mechanically coupled vibrations. To engage the UniSteep® filter, use the end tip of a paperclip or other small pointed instrument to 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	Hypercardioid
FREQUENCY RESPONSE	35-20,000 Hz
LOW-FREQUENCY ROLL-OFF	90 Hz, 18 dB/octave
OPEN CIRCUIT SENSITIVITY	-37 dB (14.1 mV) re 1V at 1 Pa
IMPEDANCE	250 ohms
MAXIMUM INPUT SOUND LEVEL	141 dB SPL, 1 kHz at 1% T.H.D.
DYNAMIC RANGE (typical)	112 dB, 1 kHz at Max SPL
SIGNAL-TO-NOISE RATIO	68 dB, 1 kHz at 1Pa
SWITCHES	Flat, roll-off
PHANTOM POWER REQUIREMENTS	11-52V DC, 4 mA typical
WEIGHT	135 g
DIMENSIONS	457.2 mm - long 8.4 mm - head diameter, 18.9 mm - base diameter
OUTPUT CONNECTOR	Integral 3-pin XLRM-type
ACCESSORIES FURNISHED	AT8109 two-stage foam windscreen
OPTIONAL INTERCHANGEABLE ELEMENTS	ESE-O omnidirectional (360°) ESE-C cardioid (120°) ESE-ML MicroLine® (90°)

Polar Pattern

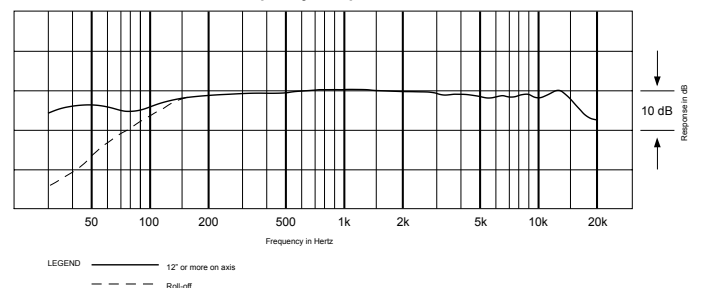


LEGEND
200 Hz ———
1 kHz ———
5 kHz - - - - -
8 kHz - - - - -

Optional Accessories:

- AT8474 universal isolation mount.
- AT8473 quick-mount stand adapter.
- AT8506 four-channel 48V phantom power supply (AC powered).
- AT8668 quick-mount plug-in microphone desk stand.
- AT8801/EU single-channel 48V phantom power supply (AC powered).

Frequency Response



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超心形指向性专业型双鹅颈式会议话筒



ES938aH 是一枚阔频宽的电容式超心形指向性话筒，高质量的收音效能，设计于增强收音、专业录音、电视广播、会议等高要求的收音应用。双鹅颈的设计，可将收音头灵活调校到任何位置，并附有防风海棉罩，可减低在讲话时收到不雅的喷气声及其他风声的情况出现。

ES938aH 规格上配备有航空金属材料及 UniGuard® - 射频干扰(RFI)屏蔽技术，特别适合亚洲语种的音头设计和提供杰出的防止射频干扰能力，避免收音时受到如手提电话等的干扰。话筒亦符合 RoHS规格，在构造上不含有欧盟禁用的危害性物质。

话筒的超心形指向性提供100°的收音角度，并可选配其他适合的收音头配合实际的应用，包括全指向性360°、心形指向性120°及超指向性 MicroLine® 90°。

内置的供电模组使用直流11V 至52V 幻象供电工作。而外壳上的一个隐藏的小型开关 UniSteep®，可设定 80 Hz

高通滤波及平直响应。

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话筒外壳使用耐用的合金铸造，并涂上黑色不反光涂层。底部接线端为标准的 XLRM-3 卡农公头，可连接到任何以 XLRF-3 设计的会议话筒上。并可选配 AT8474 绝缘防震座或 AT8473 快速插头至 5/8"-27 或 3/8"-16 转接器。

ES938aH 全长为 457.2 mm，话筒的音频输出为低阻抗平衡，音频信号以卡农公头输出端子的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。

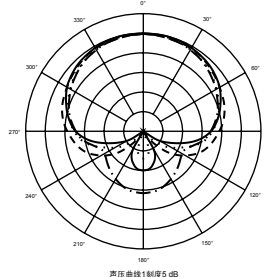
内置高质量 UniSteep® 高通滤波电路，可轻易由平直的频率响应，开启为于90 Hz以下衰减的收音效果，高通滤波器可减低话筒在近距离讲话收音时的喷气声，并可减低收音环境中低频噪声(如外间汽车引擎声，空调系统的风声等)，房间中的回声及机械性的震动声。

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，永久极性电容式
指向特性	超心形单指向性
频率响应	35-20,000 Hz
高通滤波	90 Hz, 18 dB/octave
开通灵敏度	-37 dB (14.1 mV) 以 1V 于 1 Pa
输出阻抗	250 欧姆
最大承受声压	141 dB 声压, 1 kHz 于 1% T.H.D.
动态范围 (典型)	112 dB, 1 kHz 于最高声压
讯噪比	68 dB, 1 kHz 于 1Pa
开关	平直, 高通滤波
幻象供电	直流 11-52V DC, 耗电 4 mA 典型
重量	135 克
外形尺寸	457.2 mm - 长, 8.4 mm - 收音头直径, 18.9 mm - 底部直径
输出连接器	内置式3针卡农公头
附属品	AT8109 双层式防风海棉罩
可转换收音头	ESE-O 全方向指向 (360°) ESE-C 心形指向 (120°) ESE-ML MicroLine®超指向性 (90°)

指向特性

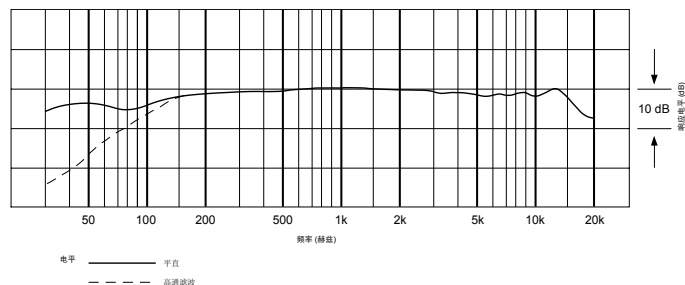


频率
200 Hz
1 kHz
5 kHz
8 kHz

选择配件:

- AT8474 绝缘防震座。
- AT8473 快速插头转接器。
- AT8506 四通通48V幻象供电座 (交流供电)。
- AT8668 座桌快速安装话筒座。
- AT8801/EU 单通道48V幻象供电座 (交流供电)。

频率特性



电平
—— 平直
- - - - 高通滤波



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