ES947

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CARDIOID CONDENSER BOUNDARY MICROPHONE

The ES947 is a wide-range condenser microphone with a unidirectional polar pattern. It is designed for unobtrusive table, ceiling or panel-mounted applications for high-quality sound reinforcement, teleconferencing, professional recording, television and other demanding sound pickup applications.

The ES947 is equipped with UniGuard® RFI-shielding technology, which offers 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 should be placed on a flat, unobstructed mounting surface. The smalldiameter capsule near the boundary eliminates phase distortion and delivers clear, high-output performance.

The microphone requires 11V to 52V phantom power for operation. The microphone is enclosed in a heavy-duty die-cast case and protected by a two-layer steel mesh grille. The low-profile housing has a low-reflectance black finish. The microphone is also available in white as the ES947W (shown above). Isolators are included with the microphone for optional mechanical isolation from the mounting surface.

Output is low impedance balanced. 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.

To mount the ES947 in a ceiling or table top without the isolators, a 20.5 mm diameter hole is required. To mount the ES947 with the isolators, a 23.5 mm hole is required. Place the isolators on either side of the hole to achieve mechanical isolation from the mounting surface. The small indented circle on the ES947 bezel indicates the "front" of the microphone.

The microphone shall be a fixed-charge condenser designed for use in table, ceiling or panel-mount boundary applications. It shall have a frequency response of 40 Hz to 12,000 Hz and an unidirectional (cardioid in a hemisphereabove the mounting surface boundary) polar pattern. It shall incorporate a self-contained power module and require 11V to 52V DC phantom power to operate. It shall offer outstanding rejection of radio frequency interference (RFI). It shall be capable of handling sound input levels up to 142 dB with a dynamic range of 113 dB. Nominal open circuit output voltage shall be 7.9 mV at 1 kHz, 1 Pascal. Output shall be low impedance balanced (200 ohms) from an integral 3-pin XLRM-type connector.

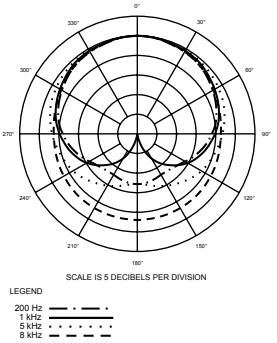
The microphone shall have a maximum diameter of 30.0 mm and an overall length of 69.0 mm. Weight shall be 64 grams. The microphone shall be housed in an all-metal case with a two-layer steel mesh grille. Finish shall be low reflectance black [white]. A small indented circle on the bezel shall indicate the "front" of the microphone. Resilient isolators shall be provided for reduction of mechanical noise transfer from the mounting panel.

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

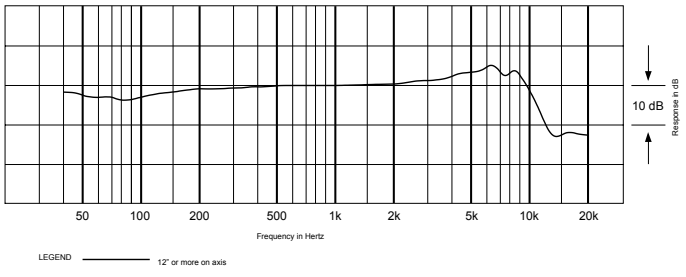
ELEMENT	Fixed-charge back plate permanently polarized condenser
POLAR PATTERN	Unidirectional (Cardioid in hemisphere above mounting surface)
FREQUENCY RESPONSE	40-12,000 Hz
OPEN CIRCUIT SENSITIVITY	-42 dB (7.9 mV) re 1V at 1 Pa
IMPEDANCE	200 ohms
MAXIMUM INPUT SOUND LEVEL	142 dB SPL, 1 kHz at 1% T.H.D.
DYNAMIC RANGE (typical)	113 dB, 1 kHz at Max SPL
SIGNAL-TO-NOISE RATIO	65 dB, 1 kHz at 1Pa
PHANTOM POWER REQUIREMENTS	11-52V DC, 2 mA typical
WEIGHT	64 g
DIMENSIONS	30.0 mm - diameter, 69.0 mm - length
OUTPUT CONNECTOR	Integral 3-pin XLRM-type
ACCESSORIES FURNISHED	One pair isolators

Polar Pattern



Optional Accessories:
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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心形指向性电容式平面话筒

ES947 是一枚阔频宽的电容式心形指向性话筒，小型的设计，特别适合安装在不显眼的桌面、天花、仪表面板上使用，可应用于专业录音、电视广播、视像会议等高要求的收音应用。

ES947 配备有 UniGuard® - 射频干扰(RFI)屏敝技术，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。

话筒应安装在一个平直及无阻碍物的平面上，接近平面的小型收音头可消除相位失真，和提供清晰及高输出的表现。

内置的供电模组使用直流11V 至52V 幻象供电工作。话筒外壳使用耐用的合金铸造及双层保护网设计，并涂上黑色不反光涂层，而ES947W为白色涂层设计。话筒配有防震绝缘胶，以防止安装面上的震动噪声。

低阻抗的平衡音频输出，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。

话筒如不需要安装防震胶时，可在天花板或桌面上开出直径20.5mm的圆孔安装；如需要连同防震胶一起安装时，则需要开出直径23.5mm的圆孔，而防震胶需要前后两端同时安装于平面上。收音头上的小圆点标记，指示出收音指向的正前方。

话筒是固定充电背板收音头设计，安装在桌面、天花、仪表面板上使用，频率响应为40Hz至12,000Hz的单指向性收音(平面上的心形半圆)，内置使用直流11V 至52V 幻象供电的供电模组。防止射频干扰(RFI)的能力，可提供达142dB的声压输入电平，而动态范围为113dB，一般开路输出电压为7.9mV。输出接线端为标准的 XLRM-3 卡农公头，可连接到任何以 XLRF-3 设计的会议话筒上。

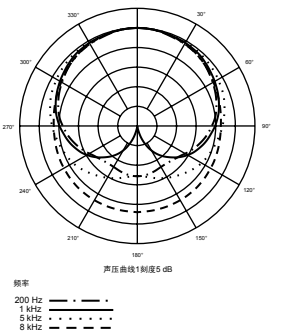
话筒最大直径为30.0mm及全长为69.0mm，重量为64克。话筒外壳为全金属结构及双层保护网设计，表面涂上低反光黑色或白色涂层，而话筒收音头的小圆点为收音指向的正前方。话筒配有防震绝缘胶，以防止安装面上的震动噪声。

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， 静电型电容式
指向特性	单指向性 (平面上的心形半圆)
频率响应	40-12,000 Hz
开通灵敏度	-42 dB (7.9 mV) 以 1V 于 1 Pa
输出阻抗	200 欧姆
最大承受声压	142 dB 声压, 1 kHz 于 1% T.H.D.
动态范围（典型）	113 dB, 1 kHz 于最高声压
讯噪比	65 dB, 1 kHz 于 1Pa
幻象供电	直流 11-52V DC, 耗电 2 mA 典型
重量	64 克
外形尺寸	30.0 mm - 直径, 69.0 mm - 长
输出连接器	内置式3针卡农公头
附属品	1对防震绝缘胶

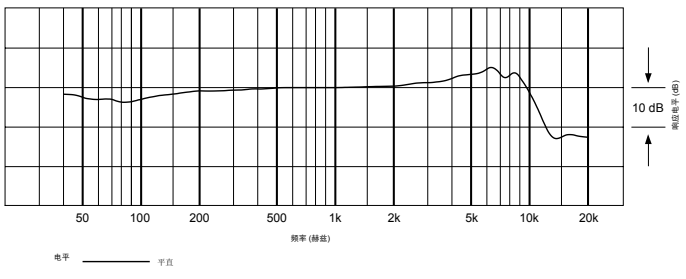
指向特性



选择配件:

AT8506 四通道48V幻象供电器 (交流供电)。
AT8668 座桌快速安装话筒座。
AT8801/EU 单通道48V幻象供电器 (交流供电)。

频率特性



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