

# AT8024

## Stereo/Mono Camera-Mount Microphone

**BROADCAST  
& PRODUCTION**  
MICROPHONES



### Features

- Designed for use with DSLR and other video cameras, delivering dramatically better sound quality than the camera's internal microphone
- Selectable line-cardioid mono or mid-side stereo modes provide the flexibility to capture high-resolution audio in any environment
- Three-position adjustable input pad and switchable low-frequency roll-off
- Integral rubber shock mounts isolate the microphone from vibration and mechanical camera noise
- Compact, lightweight design with integral shoe mount

### Description

The AT8024 is a fixed-charge condenser microphone designed for use with DSLR and other video cameras. The microphone offers the flexibility of mono and mid-side stereo modes for high-resolution audio in any environment.

The microphone is powered by a included single 1.5V AA battery. The AA battery provides optimal performance with high max SPL. A red/green LED power indicator, located on the top of the unit, illuminates green when the microphone is sufficiently powered and red when battery power is low. The AT8024 is equipped with a three-position input pad that allows for attenuation adjustment. The microphone also features an 80 Hz high-pass filter switch that permits choice of flat response or low-frequency roll-off to reduce the pickup of undesired ambient noise, room reverberation and mechanically coupled vibrations.

The microphone is enclosed in a rugged housing and includes an integral shoe mount that fits most camera shoes. Two rubber shock mounts isolate the microphone from vibration and mechanical camera noise. The microphone includes a permanently attached cable with a 3.5 mm L-type stereo plug output. A clip on the shoe mount holds the cable, relieving tension and preventing vibration noise.

A windscreen and fuzzy windscreen are also included.

### Installation and Operation

The mode switch located on the top of the unit allows user to select between mono and internally matrixed mid-side stereo modes.

**Mono Operation:** In Mono mode, the microphone uses its line-cardioid element exclusively to provide excellent off-axis rejection. This is ideal for recording interviews, dialogues or sound sources that might otherwise be drowned out in noisy environments.

**Mid-Side Stereo Operation:** In Stereo mode, the microphone provides internally matrixed mid-side stereo, delivering wide, life-like stereo sound. Locating the AT8024 nearer the sound source will enhance the apparent width of the stereo image, while decreasing room ambience. Moving the microphone away from the sound source will narrow the stereo image and provide more Mroom sound. The Stereo mode is well-suited for sporting events and other active situations where sonic realism is desired.

The integral shoe mount slides into the shoe of most cameras. Tighten the nut on the shoe mount to hold the microphone securely in place. The shoe mount is also equipped with a strain-relief clip for the cable. Insert the cable into the clip to reduce wear on the cable and eliminate noise from cable vibration.

To install the battery, press the PUSH button located on the side of the unit. This will eject the battery compartment. Insert a 1.5V AA battery according to the polarity markings in the compartment, then press the compartment back into the

body of the unit so that it clicks closed. When the mode switch is moved from the Off position to Mono or Stereo, the LED power indicator will illuminate green, showing that the microphone has power. Replace or recharge the battery when the LED illuminates red.

The attenuation can be adjusted by using the three-position input pad switch (-20 dB, -10 dB, 0 dB) located on the top of the unit. Adjust according to the volume of the sound source: -20 dB for the loudest sounds, 0 dB for the softest. The 80Hz high-pass filter switch is located along side the input pad switch. To engage the high-pass filter, slide the switch toward the "bent" line.

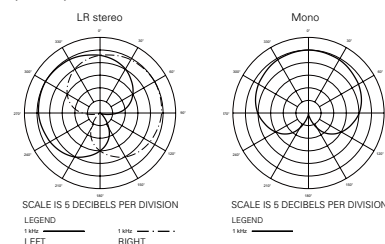
Since even slight or unexpected winds can adversely affect audio recordings, it is best to use the microphone with the supplied windscreens, or, when recording in especially windy environments, the supplied fuzzy windscreen.

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.

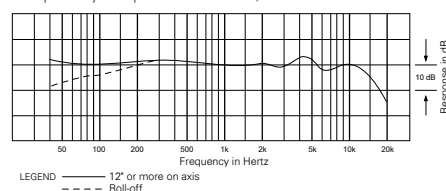
### Specifications

<b>Element</b>	Fixed-charge back plate, permanently polarized condenser
<b>Polar pattern</b>	Line-cardioid, LR stereo
<b>Frequency response</b>	40 - 15,000 Hz
<b>Low frequency roll-off</b>	80 Hz, 12 dB/octave
<b>Open circuit sensitivity (Mono &amp; LR Stereo)</b>	-37 dB (14.1 mV) re 1V at 1 Pa
<b>Impedance</b>	50 ohms
<b>Maximum input sound level (Mono &amp; LR Stereo)</b>	128 dB SPL, 1 kHz at 3% T.H.D.; 148 dB SPL, with 20 dB pad
<b>Dynamic range (typical)</b>	Mono: 106 dB, 1 kHz at Max SPL; Stereo: 104 dB, 1 kHz at Max SPL
<b>Signal-to-noise ratio</b>	Mono 72 dB, 1 kHz at 1 Pa; Stereo 70 dB, 1 kHz at 1 Pa
<b>Battery (included)</b>	Type: One 1.5V AA; Life: 100 hours typical
<b>Switches</b>	Mono, M-S Stereo; Three-position input pad; Flat, roll-off
<b>Weight</b>	114 g
<b>Dimensions</b>	172.5 mm long, 24.0 mm maximum body diameter
<b>Output connector</b>	3.5 mm stereo mini-plug on cable
<b>Cable</b>	Permanently attached 0.2m -1m coiled cable with right-angle molded 3.5 mm stereo mini-plug at output end
<b>Accessories furnished</b>	Windscreen; Fuzzy windscreen; AA battery

### polar pattern



### frequency response: 40~15,000 Hz



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FORM No. ATGC-L0324-14-E

# AT8024

心形单声道/立体声摄像机用话筒

**BROADCAST  
& PRODUCTION**  
MICROPHONES



## 特点

- 为数字单反相机和其他摄像机而设计，提供比相机内部收音头更好质量的话筒。
- 可选择以单声道线性心形或中侧立体声收音模式，灵活地在任何环境中提供高解析音频的收音。
- 三段可调的输入衰减和高通滤波设定。
- 整合式减振橡胶，能隔离相机的机械振动噪声。
- 小巧轻量的结构，配有整合式热靴接口。

## 介绍

AT8024是一枚固定充电背板式电容话筒，专为数字单反相机和其他摄像机而设计。话筒可设置为单声道或中侧立体声收音，能灵活地在任何环境中以高解析度的音频收音。

此话筒是由一节附带的单一1.5V的AA型5号电池供电，这AA型5号电池提供最强的高声压级优良性能。话筒顶部的红色/绿色LED电源指示灯能显示电池状态，绿色灯号表示电量足够；而红色灯号表示电池电量降低。AT8024配备有一个三段式输入衰减，可调节输入电平。话筒并设有一个80Hz的高通滤波开关，能选择平直响应或低频衰减，以帮助控制不需要的环境噪音。

话筒以坚固的外壳结构并配备了一个整合的热靴接口，可适用于大多数相机的热靴座。话筒配有两个橡胶防震结构，可隔离摄像机的振动噪音。另外，话筒以永久连接的导线配置于一个L型3.5mm立体声插头输出，在热靴接口上配有导线扣，可固定导线以防止振动噪音。

标准配置中附有海棉防风罩及一个毛皮档风罩。

## 安装与操作

AT8024话筒顶部设有模式选择开关，用户可选择以单声道或内置M-S中侧矩阵的立体声模式收音。

单声道收音：在单声道模式下，话筒采用了独有的线性心形指向收音元件，提供出色的离轴抑制。在采访对话的收音用中，这是理想的音源收录方式，能减低在嘈杂的环境中被噪声淹没。

中侧(M-S)立体声收音：在立体声模式下，话筒使用内部一个中侧立体声的矩阵编码，提供宽广而生动的立体声音效。把AT8024放至靠近声源时，将会增强立体感的宽度，同时会减低室内回声的氛围；当移动话筒远离声源将缩小的立体感，并带出更多“房间的声音”。立体声模式是非常适合于体育赛事和其他真实动态收音的应用。

整合的热靴接口可连接大多数的单反相机或摄像机上，把话筒推入摄像机的热靴槽内并拧紧螺母固定。热靴安装接口还配备有一个弹性扣子，可把导线套入扣子作固定，以减少拉索导线时产生的摩擦噪音。

需要安装电池时，请按下位于话筒侧面的PUSH按钮，这将会弹出电池仓。按照电池仓的极性标记放入一节1.5V AA型5号电池，然后把电池仓推回话筒机身内，直至电池仓按钮关紧。当把开关从OFF位置推至单声道或立体声模式位置时，LED电源指示灯将亮起绿色，表示明话筒供电正常。而当LED转为红色显示时，请更换电池或作出充电。

话筒顶部设有3段输入衰减开关(-20dB, -10dB, 0dB),可根据输入声源的音量调节：-20dB为最大音量衰减；0dB为没有音量衰减。衰减开关旁

边为高通滤波开关，作出80Hz以下衰减的收音效果，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。

因为即使是轻微或意外的风可以录音产生不利影响，这是最好用的麦克风所提供的挡风玻璃，或者在特别是有风的环境下拍摄时，所提供的模糊的挡风玻璃。

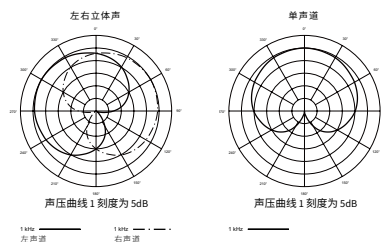
配有防风棉，能简易地套在话筒的收音头部份，有效地降低轻微或意外风声对录音产生的不利影响。而在特别大风的环境下拍摄时，亦提供有毛皮档风罩使用。

把话筒暴露于高温中可能导致输出电平逐渐及永久减弱，应避免将话筒留在日晒或长时间置于温度超过43°C的地方，而极高湿度也应避免。

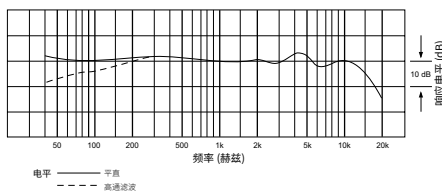
## 技术指标

收音头	固定充电背板， 静电电容式
指向特性	线性心形指向，左右立体声
频率响应	40 - 15,000 Hz
高通滤波	80 Hz, 12 dB/octave
开通灵敏度 (单声道及左右立体声)	-37 dB (14.1 mV) 以 1V 于 1 Pa
阻抗	50 欧姆
最高承受声压 (单声道及左右立体声)	128 dB 声压级, 1 kHz 于 3% T.H.D.; 148 dB 声压级, 带 20 dB 衰减
动态范围 (典型)	单声道: 106 dB, 1 kHz 于最高声压级; 立体声: 104 dB, 1 kHz 于最高声压级
信噪比	单声道: 72 dB, 1 kHz 于 1 Pa; 立体声: 70 dB, 1 kHz 于 1 Pa
电池 (附属)	1节1.5V AA型5号; 寿命: 100小时(典型)
开关	单声道/M-S立体声; 3段输入衰减; 平直/高通滤波
重量	114 克
外形尺寸	长 172.5 mm, 机体最大直径 24.0 mm
输出端子	导线上的 3.5 mm 迷你立体声插头
连接线	永久连接的 0.2m - 1m 长伸缩连接线, 配有直角型 3.5 mm 迷你立体声插头
标准配置	防风海棉罩; 防风毛皮档风罩; AA型5号电池

## 指向特性



## 频率响应: 30~20,000 Hz



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