AT8022

BROADCAST & PRODUCTION MICROPHONES

X/Y STEREO MICROPHONE

- Designed for broadcast and professional recording

- Unique coincident capsule configuration produces accurate stereo image in smaller housing

- Ideal for use with hand-held digital recording devices

- Compact, lightweight design is perfect for video camera-mount use as well as for stereo field recording, interviews and home recording

- Switchable low-frequency roll-off

- Operates on battery or phantom power

The AT8022 requires 11- 52V DC phantom power, or a 1.5V AA battery for operation. A battery need not be in place for phantom power operation. (Use battery power only when connecting the AT8022 to an unbalanced input.)

Battery installation: Unscrew the lower section of the microphone body to reveal the battery compartment. Insert a fresh 1.5V AA battery in the handle compartment ("+" end up), then reassemble the microphone. Alkaline batteries are recommended for longest life. Remove the battery during long-term storage. Battery switch must be "on" for battery operation. Turn off when not in use to preserve battery life. Battery switch has no effect on phantom power operation.

Output for each stereo channel is low impedance (Lo-Z) balanced. The balanced signals appear across Pins 2 and 3 for the left channel, Pins 4 and 5 for the right channel. Pin 1 is ground (shield) for both channels. Output is "Pins 2 and 4 hot" - positive acoustic pressure produces positive voltage at Pins 2 and 4.

Two cables are provided: one balanced cable (5-pin XLRF-type to two 3-pin XLRM-type) and one unbalanced cable (5-pin XLRF-type to 3.5 mm TRS). **NOTE: Use battery power only when connecting the AT8022 to an unbalanced input.**

Locating the AT8022 nearer the sound source enhances the width of the stereo image, while decreasing room ambience. Conversely, as the mic position moves away from the sound source, a narrower left/right stereo image results and more of the "room sound" is noted.

An integral 80 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.

The high sensitivity of the AT8022 assures useful output and an excellent match to most inputs. However, the microphone's high output may overload some sensitive electronic input stages under some conditions. Many pre-amps and mixers include a mic pad or input attenuator control to prevent overload.

The microphone is RoHS compliant–free from all substances specified in the EU directive on hazardous substances.

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
CHANNEL BALANCE	<2.5 dB
POLAR PATTERN	X/Y Stereo
FREQUENCY RESPONSE	20-15,000 Hz
LOW FREQUENCY ROLL-OFF	80 Hz, 12 dB/octave
OPEN CIRCUIT SENSITIVITY (Phantom / Battery)	-38 dB (12.5 mV) re 1V at 1 Pa -38 dB (12.5 mV) re 1V at 1 Pa
IMPEDANCE (Phantom / Battery)	250 ohms / 300 ohms
MAXIMUM INPUT SOUND LEVEL (Phantom / Battery)	128 dB / 120 dB SPL, 1 kHz at 1% T.H.D.
DYNAMIC RANGE (typical) (Phantom / Battery)	109 dB / 101 dB, 1 kHz at Max SPL
SIGNAL-TO-NOISE RATIO	75 dB, 1 kHz at 1 Pa
PHANTOM POWER REQUIRMENTS	11 - 52V DC, 2 mA (each channel)
BATTERY TYPE	1.5V AA/UM3
BATTERY CURRENT / LIFE	0.7 mA / 700 hrs typical (alkaline)
SWITCHES	Battery On/Off; Flat, roll-off
WEIGHT (less cable and accessories)	247 g
DIMENSIONS	186.0 mm long, 47.6 mm head diameter, 21.0 mm maximum body diameter
OUTPUT CONNECTOR	Integral 5-pin XLRM-type

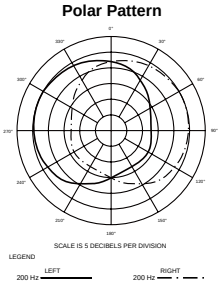
CABLES

Balanced: 2.0m long, 8 conductor, vinyl-jacketed stereo cable with 5-pin XLRF-type connector at microphone end and two 3-pin XLRM-type connectors at output end;
Unbalanced: 0.6m long stereo cable with 5-pin XLRF-type connector at microphone end and 3.5mm TRS connector at output and.

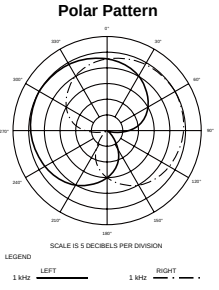
ACCESSORIES FURNISHED

AT8405a stand clamp for ⅝"-27 threaded stands; windscreen; battery; soft protective pouch

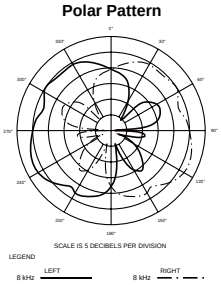
Polar Pattern



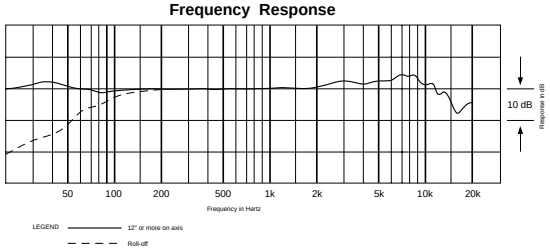
Polar Pattern



Polar Pattern



Frequency Response



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AT8022

BROADCAST & PRODUCTION MICROPHONES

X/Y立体声话筒

- 专为专业录音和广播采访的音频收音而设计。
- 独特的配对式收音头，设置于细小的头罩内，提供精确的立体声收音性能。
- 适合于手持式数字录音器材使用。
- 小型、轻量的设计，是手提摄像机的理想配置，可夹持于摄像机上作立体声同步收音、采访和家庭录影。
- 设有高通滤波开关。
- 可以使用电池或幻象供电工作。

AT8022话筒需使用11V至52V幻象供电或1.5V AA电池工作，当使用幻象电源时，可以不安装电池。(在使用非平衡连线时，需安装电池使用)

安装电池时，旋开话筒底部的电池盖，确认电池的极性(跟随电池盒内的标记)，放入一枚新的1.5V AA电池('+'极向上)，再旋回电池盖，关启供电开关便可工作。建议使用碱性电池，而长时间不使用时，请把电池取出。在使用幻象电源时，供电开关没有作用。

话筒的每通道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号针脚作左通道输出，4号及5号针脚作右通道输出，而1号针脚则为左右通道地线(屏蔽)连接。输出相位将以正相位电平设于2号和4号针脚上。

提供了两组话筒接线，分别为平衡接线(5针卡农母头连接至两路3针卡农公头)及非平衡接线(5针卡农母头连接3.5mm立体声插头)。**注意：在使用非平衡连线时，需安装电池使用。**

请把AT8022话筒放置于接近音源的位置，以减少回音混响和提高立体声收音效果。远离音源时会收窄立体声音像和增加“房间回声”混响。

内置高通滤波电路，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，应用高通滤波器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。

AT8022提供高灵敏度的收音效能，可确保能接收到最大的音源。而在某些情况下，为避免发生超负载输入而出现破声的情况，需要在话筒和前置放大器之间加入电平衰减器。

话筒符合RoHS规格，在构造上不含有欧盟禁用的危害性物质。

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
通道平衡		<2.5 dB
指向特性		X/Y 立体声
频率响应		20-15,000 Hz
高通滤波		80 Hz, 12 dB/octave
开通灵敏度	(幻象供电) (电池)	-38 dB (12.5 mV) / -38 dB (12.5 mV) 以 1V 于 1 Pa
输出阻抗	(幻象供电/电池)	250 欧姆 / 300 欧姆
最大承受声压	(幻象供电/电池)	128 dB / 120 dB 声压, 1 kHz 于 1% T.H.D.
动态范围 (典型)	(幻象供电/电池)	109 dB / 101 dB, 1 kHz 于最高声压
讯噪比		75 dB, 1 kHz 于 1 Pa
电池种类		1.5V AA型 5号电池
耗电/电池寿命		0.7 mA / 700小时 (碱性电池)
幻像供电		直流 11 - 52V, 耗电 2mA 典型每通道
开关		电池开关；平直 / 高通滤波
重量		247 g
外形尺寸		186.0 mm 长, 47.6 mm 头罩直径 21.0 mm 机身最大直径
输出连接器		内置 XLRM-5针卡农公头

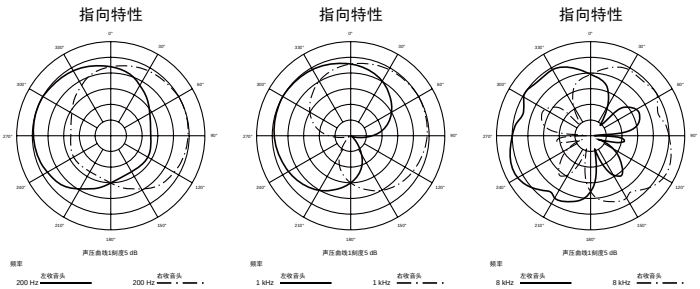
连线

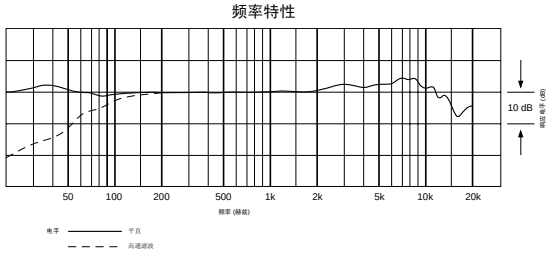
平衡接线：2.0 m 长，8芯线屏蔽式聚乙烯护套立体声电缆带5针卡农母头连接话筒，及两路3针卡农公头于输出端。

非平衡接线：0.6 m 长，立体声电缆带5针卡农母头连接话筒，及 3.5 mm 立体声插头于输出端。

附属品

AT8405a ⅝"-27接头转轴式支架；防风罩；电池；保护软袋





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