

U851A / U851R / U851RW



CARDIOID CONDENSER BOUNDARY MICROPHONE



- Designed for surface-mount applications such as high-quality sound reinforcement, professional recording, television, conferencing and other demanding sound pickup situations.
- PivotPoint™ rotating output connector allows cable to exit from either the rear or the bottom of the microphone.
- Superior off-axis rejection for maximum gain before feedback.
- UniGuard™ RFI-shielding technology offers outstanding rejection of radio frequency interference (RFI).

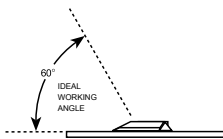
- Small-diameter UniPoint capsule near boundary eliminates phase distortion and delivers clear, high-output performance.
- Heavy die-cast case and non-slip silicon foam bottom pads minimize coupling of surface vibration to the microphone.
- Low-profile design with low-reflectance finish for minimum visibility.
- UniSteep® filter provides a steep low-frequency attenuation to improve sound pickup without affecting voice quality on U851A power module.
- U851A can be operating on battery or phantom power.
- U851R has contained electronics eliminate need for external power module.
- Available in two colors: black (U851A / U851R) and white (U851RW).

The U851A requires 11V to 52V DC phantom power or a 1.5V AA battery for operation. A battery need not be in place for phantom power operation.

Alkaline batteries are recommended for longest life. Remove the battery during long-term storage.

The U851R requires 11V to 52V phantom power for operation only.

Supplied as a cardioid, U851A / U851R / U851RW accepts interchangeable elements to permit selection of angle of acceptance from 100° to 360°.



The microphone should be placed on a flat, unobstructed mounting surface, with the front of the microphone facing the sound source. The sound source should not be below, or high than 60° above, the plane of the mounting surface.

Output from 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.

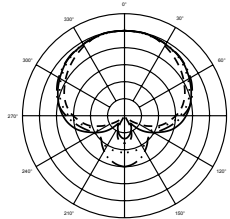
At integral 80 Hz high-pass UniSteep® filter provides easy switching from a flat frequency response to a low-end roll-off. The roll-off position reduces the pickup of low-frequency ambient noise (such as traffic, air-handling systems, etc.), room reverberation and mechanically coupled vibrations.

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

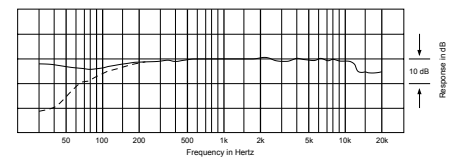
ELEMENT	Fixed-charge back plate permanently polarized condenser	
POLAR PATTERN	Half-cardioid in hemisphere above mounting surface	
FREQUENCY RESPONSE	30-20,000 Hz	
LOW FREQUENCY ROLL-OFF	80 Hz, 18 dB/octave	
OPEN CIRCUIT SENSITIVITY	(re 1V at 1 Pa)	
	U851A (Phantom / Battery)	-40 dB (10.0 mV) / -41 dB (8.9 mV)
	U851R	-34 dB (19.9 mV)
IMPEDANCE		
	U851A (Phantom / Battery)	200 ohms / 270 ohms
	U851R	200 ohms
MAXIMUM INPUT SOUND LEVEL	(1 kHz at 1% T.H.D.)	
	U851A (Phantom / Battery)	133 dB / 123 dB SPL
	U851R	134 dB SPL
DYNAMIC RANGE (typical)	(1 kHz at Max SPL)	
	U851A (Phantom / Battery)	111 dB / 101 dB
	U851R	108 dB
SIGNAL-TO-NOISE RATIO		
	U851A	72 dB, 1 kHz at 1Pa
	U851R	68 dB, 1 kHz at 1Pa
PHANTOM POWER REQUIREMENTS	11-52V DC, 4 mA typical	
SWITCH		
	U851A	Off, on-flat, on-roll-off
	U851R	Flat, roll-off
BATTERY TYPE (U851A)	1.5V AA/UM3	
BATTERY CURRENT / LIFE (U851A)	0.4 mA / 1200 hrs typical (alkaline)	
WEIGHT		
	MICROPHONE (U851A / U851R)	244 g / 262 g
	POWER MODULE (U851A)	139 g
DIMENSIONS		
	MICROPHONE	108 mm - long, 23 mm - height, 84 mm - maximum width,
	POWER MODULE (U851A)	84 mm(H) x 63 mm(W) x 22 mm(D)
OUTPUT CONNECTOR		
	U851A	Integral 3-pin XLRM-type (power module)
	U851R	TB3M-type
CABLE	7.6m long, 3.2mm diameter, 2-conductor shielded cable with TA3F-type connector. (and XLRM-type connector for U851R)	
OPTIONAL INTERCHANGEABLE ELEMENTS	UE-C cardioid (120°) UE-H hypercardioid (100°) UE-O omnidirectional (360°)	
ACCESSORIES FURNISHED		
	U851A	AT8531 power module, battery, soft pouch
	U851R	Soft protective pouch

Polar Pattern



LEGEND
SCALE IS 5 DECIBELS PER DIVISION
200 Hz ———
1 kHz ———
5 kHz ———
8 kHz ———

Frequency Response



LEGEND ——— 12° or more on axis
- - - - - Roll-off

U851A / U851R / U851RW

unipoint®

心形指向性平面式会议话筒



- 设计在平面放置应用，提供高质量收音、会议、遥距教学、及其他高要求的收音应用。
- PivotPoint™ 转动式输出连接头，可因需要把输出连接线设置为话筒背后或话筒底部输出。
- 半球形单一指向性，可抑制后方杂音而清楚地在前方收音。
- UniGuard™ - 射频干扰(RFI)屏蔽技术，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。

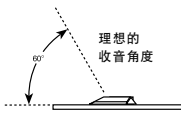
- 细小的UniPoint系列收音头，可消除反射式相位失真，并提供清晰及高信号的音频输出。
- 以压铸铸造的坚固外壳及话筒底部的防滑砂泡棉，可减低桌面震动对话筒的影响。
- 平放不显眼的设计，并涂上低反光的颜色涂料。
- UniSteep® - 在U851A供电模组上设有高通滤波器，提供了一个高效能的高通滤波，把低频噪声作出衰减而无损语音的收音质量。
- U851A可使用幻象供电或电池供电操作，当使用幻象供电时，可不用安装电池。
- U851R内置话筒前置放大器供电组件，无需使用外置供电模组。
- 设有两种颜色选择：黑色U851A/U851R，及白色U851RW。

U851A话筒使用直流11V至52V幻象供电或一枚1.5V AA 3号电池供电操作，当使用幻象供电时，可不用安装电池。

建议使用硷性电池工作，当长期不使用电池时，请把电池取出。

U851R话筒只作直流11V至52V幻象供电操作。

标准为心形指向配置，但可选配适合的收音头更换配合实际的应用，收音角度可由100°至360°。



话筒应放置在平面上，及没有阻碍物的环境使用。音源应在话筒的前方发声，理想的收音角度应在平面至60°高度之内。

低阻抗的平衡音频输出，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。

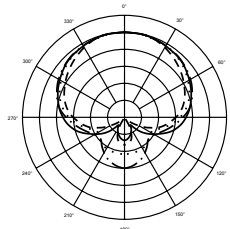
内置高质量高通滤波电路，可轻易由平直的频率响应，开启为于80 Hz以下衰减的收音效果，应高通滤波器可减低收音环境中低频噪声(如外间汽车引擎声，空调系统的风声等)，房间中的回声及机械性的震动声。

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。

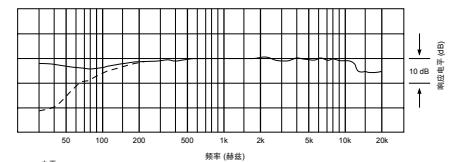
技术指标

收音头	固定充电背板，静电型电容式	
指向特性	半球形心形单指向性	
频率响应	30-20,000 Hz	
高通滤波	80 Hz, 18 dB/octave	
开通灵敏度	(以 1V 于 1 Pa)	
	U851A (幻象供电/电池)	-40 dB (10.0 mV) / -41 dB (8.9 mV)
	U851R	-34 dB (19.9 mV)
输出阻抗		
	U851A (幻象供电/电池)	200 欧姆 / 270 欧姆
	U851R	200 欧姆
最大承受声压	(1 kHz 于 1% T.H.D.)	
	U851A (幻象供电/电池)	133 dB / 123 dB 声压
	U851R	134 dB 声压
动态范围 (典型)	(1 kHz 于最高声压)	
	U851A (幻象供电/电池)	111 dB / 101 dB
	U851R	108 dB
讯噪比		
	U851A	72 dB, 1 kHz 于 1Pa
	U851R	68 dB, 1 kHz 于 1Pa
幻象供电	直流 11-52V, 耗电 4 mA 典型	
开关		
	U851A	关闭, 平直, 高通滤波
	U851R	平直, 高通滤波
电池种类 (U851A)	1.5V AA 3号电池	
电池耗电量 / 电池寿命 (U851A)	0.4 mA / 1200 小时 (典型硷性电池)	
重量		
	话筒 (U851A / U851R)	244 克 / 262 克
	供电模组 (U851A)	139 克
外形尺寸	话筒	
	108 mm - 长, 23 mm - 高,	
	84 mm - 最大宽度	
	供电模组 (U851A)	
	84 mm(高) x 63 mm(宽) x 22 mm(厚)	
输出连接器	U851A	
	内置式3针卡农公头 (供电模组)	
	U851R	TB3M-3针卡农公座
连接线	7.6m 长, 3.2 mm 直径连接线, 2蕊线连屏蔽电线, 以TA3F插头连接 (U851R再附3针卡农公头插头)	
可转换收音头	UE-C 心形指向 (120°) UE-H 超心形指向 (100°) UE-O 全方向性 (360°)	
附属品	U851A	
	U851R	AT8531 双供电模组, 电池, 保护袋 保护袋

指向特性



频率特性



声压曲线1制度5 dB
频率
200 Hz
1 kHz
8 kHz



audio-technica®

Machida · Tokyo · Japan

鐵三角®