

# U853RU / U853RWU

UniLine® Condenser Hanging Microphones



## Features

- Designed for suspension over choirs, instrumental groups and theater stages
- UniLine® polar pattern provides narrow 90° acceptance angle
- Superior off-axis rejection for maximum gain before feedback
- UniGuard® RFI-shielding technology offers outstanding rejection of radio frequency interference (RFI)
- UniSteep® filter provides a steep low-frequency attenuation to improve sound pickup without affecting voice quality
- Accepts interchangeable elements to permit angle of acceptance from 90° to 360°
- Low-profile design with low-reflectance finish for minimum visibility
- Available in two colors: black (U853RU) and white (U853RWU)

## Description

The U853RU requires 11V to 52V DC phantom power operation.

A uniform 90° angle of acceptance provides well-balanced audio pickup over a narrow area. The microphone should be located forward of the front-most source, above the rear-most source, and "aimed" between them (Fig. 1). Increasing the height of the mic above the sources will tend to equalize sound levels between them, but may also increase background/reverberant sound pickup. When possible, the distance from the mic to the rear-most source should be no more than twice the distance to the front source, to maintain front-to-rear balance (Fig. 1).

Width of pickup is approximately 1.5 times the distance to the closest performer. If additional mics are needed for wide sources, they should be positioned apart laterally at least 1.5 times the distance to the front source, to avoid phase cancellation (Fig. 2).

To orient the microphone in the proper direction, twist the housing slightly in its wire holder. (Clockwise rotation moves the microphone to the right; counterclockwise rotation moves it to the left.)

Output from the power module's 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.

An 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

<b>Element</b>	Fixed-charge back plate, permanently polarized condenser
<b>Polar pattern</b>	Line Cardioid
<b>Frequency response</b>	30-20,000 Hz
<b>Low frequency roll-off</b>	80 Hz, 18 dB/octave
<b>Open circuit sensitivity</b>	-35 dB (177 mV)
<b>Impedance</b>	250 ohms
<b>Maximum input sound level</b>	135 dB SPL, 1 kHz at 3% T.H.D.
<b>Dynamic range (typical)</b>	115 dB, 1 kHz at Max SPL
<b>Signal-to-noise ratio</b>	74 dB, 1 kHz at 1 Pa
<b>Phantom power requirements</b>	11-52V DC, 2 mA typical
<b>Switch</b>	Flat, roll-off
<b>Weight</b>	Microphone: 30 g Power module: 81 g
<b>Dimensions</b>	Microphone: 156.0 mm long, 12.2 mm diameter Power module: 92.9 mm long, 18.9mm diameter
<b>Output connector (Power module)</b>	Integral 3-pin XLRM-type
<b>Cable</b>	7.6 m long, 3.2 mm diameter, 2-conductor shielded cable, terminated with TA3F-type connector
<b>Optional interchangeable elements</b>	UE-C cardioid (120°) UE-H hypercardioid (100°) UE-O omnidirectional (360°)
<b>Accessories furnished</b>	U853AU - AT8154 two-stage foam windscreen; AT8451 steel hanger U853AWU - AT8154(WH) two-stage foam windscreen; AT8451(WH) steel hanger Both - AT8538 power module, AT8438 5/8"-27 stand adapter

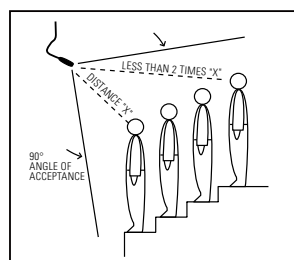
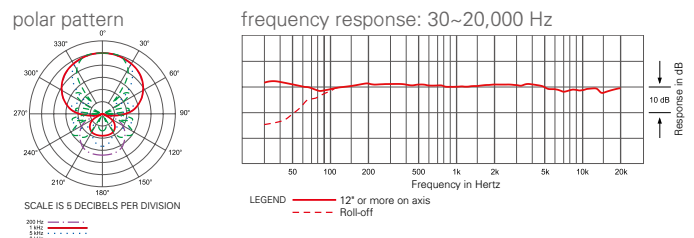


Fig.1

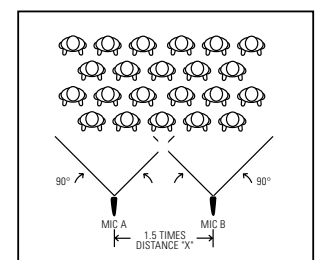


Fig.2

# U853RU / U853RWU

UniLine® 超指向性悬挂式电容话筒

# unipoint



## 特点

- 设计于悬挂式安装，提供高质量收音给合唱、乐团、及舞台话剧等高要求的收音应用。
- UniLine® 超指向收音头，提供窄角度90°的收音角度。
- 良好的隔音设计，在最大增益时仍能避免啸叫声的出现。
- 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。
- UniSteep® 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。
- 可选配适合的收音头更换配合实际的应用，收音角度可由90°至360°。
- 不显眼的设计，并涂上低反光的颜色涂料。
- 设有两种颜色选择: 黑色 (U853RU)，及白色 (U853RWU)。

## 介绍

U853RU话筒使用直流11V至52V幻象供电操作。

统一的90°收音角度，能在一个狭窄的区域中提供一个良好的平衡收音。话筒安装时，应先决定最前及最后的声源位置，而话筒应瞄准两者之间的中央位置(图1)，然后提升话筒高度，使前后声源趋向平衡；但却可能会增加背景噪音声及回声，所以调校话筒时，应避免最后的声源距离长于最前声源的两倍(图1)，以维持前后平衡。

而与其他话筒的宽度距离，应以最前声源的大致1.5倍距离为最佳设定(图2)，这样做既可覆盖每点声源，又可避免话筒的相位互相抵消情况出现。

话筒附有一条悬挂弹簧，可将收音头固定调校到任何正确位置。(把收音顺时针转动，话筒会向右转；反时针转动时，话筒会左转)

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。

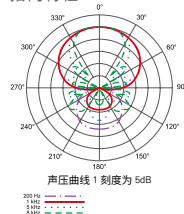
内置高质量高通滤波电路，可由平直的频率响应，开启为于80 Hz以下衰减的收音效果，应高通滤波器可减低收音环境中低频噪声(如外间汽车引擎声，空调系统的风声等)，房间中的回声及机械性的震动声。

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	超指向性
频率响应	30-20,000 Hz
高通滤波	80 Hz, 18 dB/octave
开通灵敏度	-35 dB (17.7 mV) 以 1V 于 1 Pa
阻抗	250 欧姆
高最大承受声压	135 dB 声压级, 1 kHz 于 3% T.H.D.
动态范围 (典型)	115, 1 kHz 于最高声压级
信噪比	74 dB, 1 kHz 于 1 Pa
幻象供电	直流 11-52V, 耗电 2 mA 典型
开关	平直, 高通滤波
重量	话筒: 30 克 供电模组: 81 克
外形尺寸	话筒: 156.0 mm 长, 12.2 mm 外径 供电模组: 92.9 mm 长, 18.9 mm 外径
输出端子(供电模组)	内置式 3 针卡农公头
连接线	7.6m 长(固定装置于收音头中), 3.2 mm 直径连接线, 2蕊线连屏蔽电线, 以TA3F插头连接
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°)
标准配置	
U853RU -	AT8154 双层式防风海棉罩; AT8451 悬挂弹簧
U853RWU -	AT8154(WH) 双层式防风海棉罩; AT8451(WH) 悬挂弹簧
共同 -	AT8538 供电模组, AT8438 1/8"-27 话筒座架

指向特性



频率响应: 30~20,000 Hz

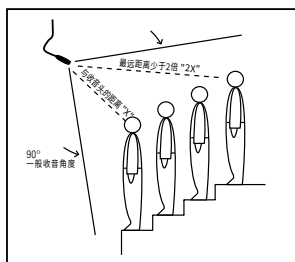
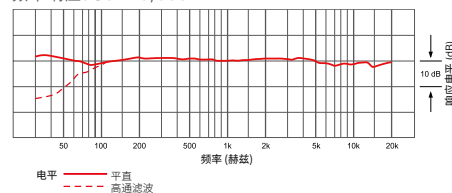


图1

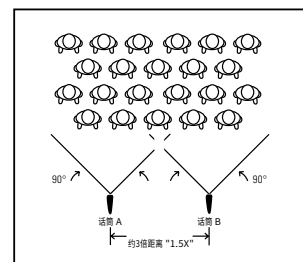


图2