U853R/U853RW *CARDIOID CONDENSER HANGING MICROPHONES*

unipoint®

- Designed for suspension over choirs, instrumental groups and theater stages
- 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 (U853R) and white (U853RW)

The U853R requires 11V to 52V phantom power for operation.

A uniform 120° angle of acceptance provides well-balanced audio pickup. 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 pickup 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 three times the distance to the closest performer. If additional mics are needed for wide sources, they should be positioned apart laterally at least three 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.

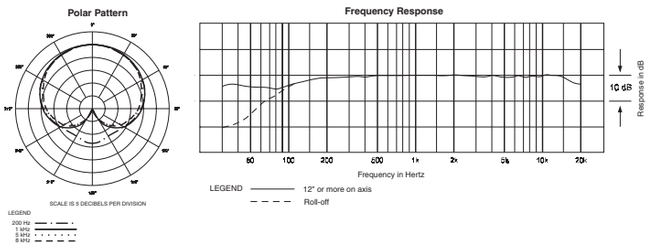
Avoid leaving the microphone in the open sun or in areas where temperatures exceed 110° F (43° C) for extended periods. Extremely high humidity should also be avoided.

NOTE: Audio-Technica has developed a special RFI-shielding mechanism, which is an integral part of the connectors in the UniPoint line. If you remove or replace the connector, you may adversely affect the unit's RFI immunity.

U853R/U853RW SPECIFICATIONS†

ELEMENT	Fixed-charge back plate permanently polarized condenser
POLAR PATTERN	Cardioid
FREQUENCY RESPONSE	30-20,000 Hz
LOW FREQUENCY ROLL-OFF	80 Hz, 18 dB/octave
OPEN CIRCUIT SENSITIVITY	–39 dB (11.2 mV) re 1V at 1 Pa*
IMPEDANCE	250 ohms
MAXIMUM INPUT SOUND LEVEL	139 dB SPL, 1 kHz at 1% T.H.D.
DYNAMIC RANGE (typical)	115 dB, 1 kHz at Max SPL
SIGNAL-TO-NOISE RATIO[1]	70 dB, 1 kHz at 1 Pa*
PHANTOM POWER REQUIREMENTS	11-52V DC, 2 mA typical
SWITCH	Flat, roll-off
WEIGHT	
MICROPHONE	0.5 oz (14 g)
POWER MODULE	2.9 oz (81 g)
DIMENSIONS	
MICROPHONE	1.34" (34.0 mm) long, 0.48" (12.2 mm) diameter
POWER MODULE	3.66" (92.9 mm) long, 0.74" (18.9 mm) diameter
OUTPUT CONNECTOR (power module)	Integral 3-pin XLRM-type
CABLE	25.0' (7.6 m) long (permanently attached to microphone), 0.13" (3.2 mm) diameter, 2 conductor shielded cable with TA3F-type connector
OPTIONAL INTERCHANGEABLE ELEMENTS	UE-H hypercardioid (100°); UE-O omnidirectional (360°); UE-UL UniLine™ (90°)
ACCESSORIES FURNISHED	
U853R	AT8153 two-stage foam windscreen; AT8451 steel hanger
U853RW	AT8153(WH) two-stage foam windscreen; AT8451(WH) steel hanger
BOTH	AT8538 power module; AT8438 5/8"-27 stand adapter

†In the interest of standards development, A.T.U.S. offers full details on its test methods to other industry professionals on request.
*1 Pascal = 10 dynes/cm² = 10 microbars = 94 dB SPL
[1] Typical, A-weighted, using Audio Precision System One.
Specifications are subject to change without notice.



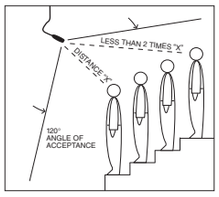


Figure 1

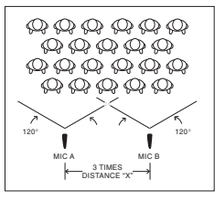


Figure 2

audio-technica®

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