# **U843R** MULTIDIRECTIONAL CONDENSER BOUNDARY MICROPHONE

# unipoint



Multidirectional cardioid condenser elements mounted in a single housing. U843R can be adjusted to proper positioning simply of divided angle between 90° to 120° by two corresponding elements (Ch1 and Ch3). Each elements can be powered and used individually or in any combination.

- Designed for surface-mount applications such as highquality sound reinforcement and provide total coverage of round table or longer table with fewer microphones.
- U843R is ideal for a variety of video and audio conferencing application, especially when used with an Audio-Technica automatic SmartMixer<sup>TM</sup>.
- Small-diameter UniPoint capsule near boundary eliminates phase distortion and delivers clear, high-output performance.
- UniGuard™ RFI-shielding technology offers outstanding rejection of radio frequency interference (RFI).
- 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.

The microphone requires 11V to 52V DC phantom power for operation and



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 higher than 60° above, the plane of the mounting surface.

Output from the microphone is low impedance (Lo-Z) balanced. For U843R, the appears across the pair of colour wires (red and yellow wires for Ch1, white and blue wires for Ch2, and green and brown wires for Ch3); audio ground is the shield connection. Output is phased so that positive acoustic pressure produces positive voltage on the yellow, green and white wires.

Avoid leaving the microphone in the open sun or in areas where temperatures exceed  $43^{\circ}$ C for extended periods. Extremely high humidity should also be avoided.

For U843R applications that require the microphone to adjust the elements for omnidirectional (3 channels combination with 120° angle divided) or bidirectional (Ch1 and Ch2 combination with 90° angle divided) configuration.

For correct orientation, position the microphone so the brand name of "audio-technica" is Ch3, "•" marks are 90° position of Ch1 and Ch2, "• " marks are 120° position of Ch1 and Ch2.



## SPECIFICATIONS

ELEMENT	Fixed-charge back plate permanently polarized condenser
POLAR PATTERN	Hemispherical Cardioid x 3 (combine to omin-directional or bidirectional)
FREQUENCY RESPONSE	70-16,000 Hz
OPEN CIRCUIT SENSITIVITY	-37 dB (14.1 mV) re 1V at 1 Pa
IMPEDANCE	100 ohms
MAXIMUN INPUT SOUND LEVEL	134 dB SPL, 1 kHz at 1% T.H.D.
DYNAMIC RANCE (TYPICAL)	105 dB, 1 kHz at Max SPL
SIGNAL-TO-NOISE RATIO	65 dB, 1 kHz at 1 Pa
PHANTOM POWER REQUIREMENTS	11-52V DC, 2mA typical
SWITCH	The lever of elements can adjust the proper position
WEIGHT (less cable)	160 g
DIMENSIONS	20.0 mm - height, 85.0 mm - maximum body diameter
CABLE	7.6 m long (permanently attached to microphone), 4 mm diameter, 6 conductor, shielded cable; output end stripped and tinned for connection to electronic device
ACCESSORIES FURNISHED	Soft protective pouch

#### Optional Accessories:

AT8506 four-channel 48V phantom power supply (AC powered). AT8801/EU single-channel 48V phantom power supply (AC powered).



### **Combinations:**



300° + bidirectional + bidirectional + 300° coverage

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