

# U841A OMNIDIRECTIONAL CONDENSER BOUNDARY MICROPHONE



- Designed for surface-mount applications such as high-quality sound reinforcement, professional recording, television, conferencing and other demanding sound pickup situations
- 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

- Small-diameter UniPoint capsule near boundary eliminates phase distortion and delivers clear, high-output performance
- Heavy die-cast case and silicon foam bottom pad minimize coupling of surface vibration to the microphone
- Low-profile design with low-reflectance black finish for minimum visibility
- Operates on battery or phantom power

The U841A 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.

Battery installation: Remove the cap from the top of the power module. Insert a fresh 1.5V AA battery (“+” end toward the cap release button), then reassemble the power module. Alkaline batteries are recommended for longest life. Remove the battery during long-term storage.

The microphone should be placed on a flat, unobstructed mounting surface. The sound source should not be below the plane of the mounting surface.

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.

**NOTE:** Placing any object on a surface (such as a conference table) before its finish is fully cured may result in damage to the finish.

## U841A SPECIFICATIONS<sup>1</sup>

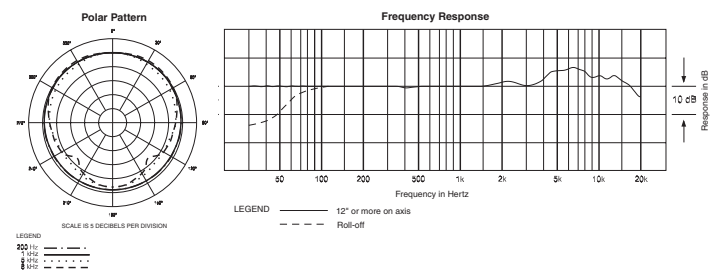
<b>ELEMENT</b>	Fixed-charge back plate permanently polarized condenser
<b>POLAR PATTERN</b>	Omnidirectional in hemisphere above mounting surface
<b>FREQUENCY RESPONSE</b>	30-20,000 Hz
<b>LOW FREQUENCY ROLL-OFF</b>	80 Hz, 18 dB/octave
<b>OPEN CIRCUIT SENSITIVITY</b> (Phantom / Battery)	-39 dB (11.2 mV) / -40 dB (10.0 mV) re 1V at 1 Pa*
<b>IMPEDANCE</b> (Phantom / Battery)	200 ohms / 270 ohms
<b>MAXIMUM INPUT SOUND LEVEL</b> (Phantom / Battery)	132 dB / 122 dB SPL, 1 kHz at 1% T.H.D.
<b>DYNAMIC RANGE</b> (typical) (Phantom / Battery)	111 dB / 101 dB, 1 kHz at Max SPL
<b>SIGNAL-TO-NOISE RATIO<sup>1</sup></b>	73 dB, 1 kHz at 1 Pa*
<b>PHANTOM POWER REQUIREMENTS</b>	11-52V DC, 2 mA typical
<b>BATTERY TYPE</b>	1.5V AA/UM3
<b>BATTERY CURRENT / LIFE</b>	0.4 mA / 1200 hours typical (alkaline)
<b>SWITCH</b>	Off, on-flat, on-roll-off
<b>WEIGHT</b>	
<b>MICROPHONE</b>	2.8 oz (78 g)
<b>POWER MODULE</b>	4.9 oz (139 g)
<b>DIMENSIONS</b>	
<b>MICROPHONE</b>	2.56" (65.0 mm) diameter, 0.59" (15.1 mm) height
<b>POWER MODULE</b>	3.31" (84.0 mm) H x 2.48" (63.0 mm) W x 0.87" (22.0 mm) D
<b>OUTPUT CONNECTOR</b> (power module)	Integral 3-pin XLRM-type
<b>CABLE</b>	25' (7.6 m) long (permanently attached to microphone), 0.13" (3.2 mm) diameter, 2-conductor, shielded cable with TA3F-type connector
<b>ACCESSORIES FURNISHED</b>	AT8531 power module; battery; soft protective pouch

<sup>†</sup>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/cm<sup>2</sup> = 10 microbars = 94 dB SPL

<sup>1</sup> Typical, A-weighted, using Audio Precision System One.

Specifications are subject to change without notice.



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