U841A

OMNIDIRECTIONAL CONDENSER
BOUNDARY MICROPHONE

unipoint®

- 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.
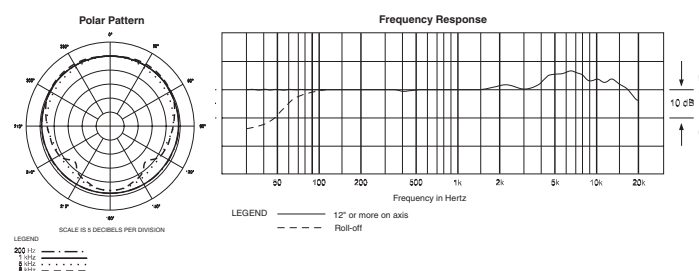
U841A SPECIFICATIONS†

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

†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.

Polar Pattern

SCALE IS 5 DECIBELS PER DIVISION

LEGEND
200 Hz
1 kHz
8 kHz

Frequency Response

Response in dB

10 dB

50   100   200   500   1k   2k   5k   10k   20k

Frequency in Hertz

LEGEND ——— 12" or more on axis
– – – Roll-off

audio-technica®