

BP4071 LINE + GRADIENT CONDENSER MICROPHONE



- Designed for use in broadcasting, film/TV production, and theater sound reinforcement applications
- Direct-coupled, balanced output ensures a clean signal even in high-output conditions
- Rugged housing made of lightweight structural-grade aluminum alloy
- Transformerless design for improved pickup of transients
- Switchable 80 Hz high-pass filter & 10 dB pad
- RoHS-compliant – free from all substances specified in the EU directive on the reduction of hazardous substances (RoHS)

The BP4071 is intended for use in professional applications where remote power is available. It requires 48V DC phantom power, which may be provided by a mixer or console, or by a separate, in-line or phantom power supply.

Output from the microphone'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.

To avoid phase cancellation and poor sound, all mic cables must be wired consistently: Pin 1-to-Pin 1, etc.

An integral 80 Hz high-pass 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.

The BP4071 is also equipped with a switchable 10 dB pad that lowers the microphone's sensitivity, thus providing higher SPL capability for flexible use for a wide range of speakers/performers and system configurations. To engage the 10 dB pad, use the end tip of a paperclip or other small pointed instrument to slide the switch toward the -10 position.

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.

BP4071 SPECIFICATIONS*

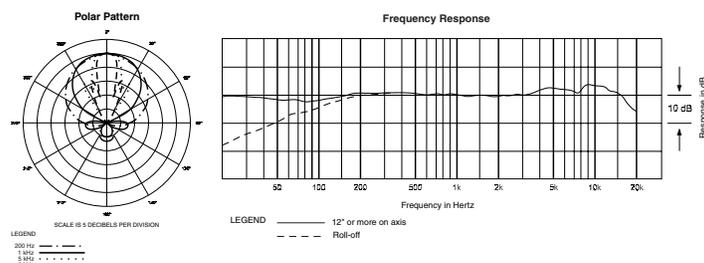
ELEMENT	Externally polarized (DC bias) capacitor
POLAR PATTERN	Line + gradient
FREQUENCY RESPONSE	20-20,000 Hz
LOW FREQUENCY ROLL-OFF	80 Hz, 12 dB/octave
OPEN CIRCUIT SENSITIVITY	-29 dB (35.5 mV) re 1V at 1 Pa*
IMPEDANCE	50 ohms
MAXIMUM INPUT SOUND LEVEL	141 dB SPL, 1 kHz at 1% T.H.D.; 151 dB SPL, with 10 dB pad (nominal)
NOISE[†]	13 dB SPL
DYNAMIC RANGE (typical)	128 dB, 1 kHz at Max SPL
SIGNAL-TO-NOISE RATIO[‡]	81 dB, 1 kHz at 1 Pa*
PHANTOM POWER REQUIREMENTS	48V DC, 4.8 mA typical
SWITCHES	Flat, roll-off; 10 dB pad (nominal)
WEIGHT (less accessories)	136 g (4.8 oz)
DIMENSIONS	395.0 mm (15.55") long, 21.0 mm (0.83") maximum body diameter
OUTPUT CONNECTOR	Integral 3-pin XLRM-type
ACCESSORIES FURNISHED	AT8405a stand clamp for 5/8"-27 threaded stands; 5/8"-27 to 3/8"-16 threaded adapter; AT8145 windscreen; two O-Rings; protective carrying case

[†]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

[‡] Typical, A-weighted, using Audio Precision System One.

Specifications are subject to change without notice.



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