

# 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
- Innovative acoustic design provides same directivity as mics up to 50% longer
- 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

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 source such as the Audio-Technica AT8801 single-channel or AT8506 four-channel phantom power supplies.

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 hi-pass filter provides easy switching from a flat frequency response to a low-end roll-off. The roll-off position reduces the microphone's sensitivity to popping in close vocal use. It also reduces the pickup of low-frequency ambient noise (such as traffic, air-handling systems, etc.), room reverberation and mechanically-coupled vibrations.

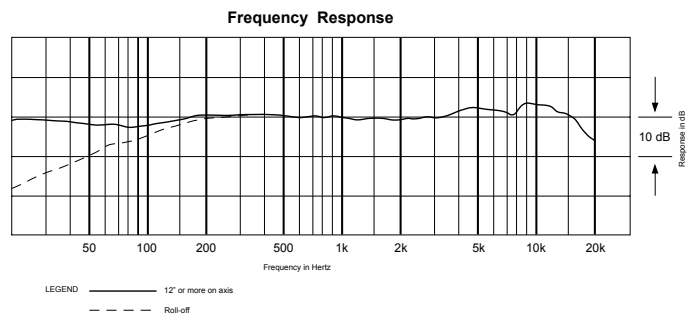
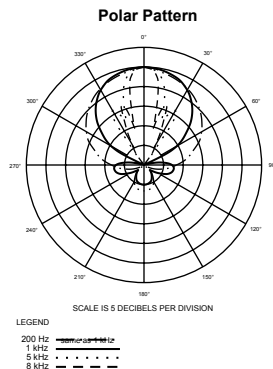
The BP4071 is also equipped with a switchable 10 dB pad that lowers the microphone's sensitivity, thus providing higher SPL capability for flexible use for a wide range of speakers/performers and system configurations.

The microphone is RoHS compliant—free from all substances specified in the EU directive on hazardous substances.

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

### SPECIFICATIONS

<b>ELEMENT</b>	Externally polarized (DC bias) capacitor
<b>POLAR PATTERN</b>	Line + gradient
<b>FREQUENCY RESPONSE</b>	20-20,000 Hz
<b>LOW FREQUENCY ROLL-OFF</b>	80 Hz, 12 dB/octave
<b>OPEN CIRCUIT SENSITIVITY</b>	-29 dB (35.5 mV) re 1V at 1 Pa
<b>IMPEDANCE</b>	50 ohms
<b>MAXIMUM INPUT SOUND LEVEL</b>	141 dB SPL, 1 kHz at 1% T.H.D.; 151 dB SPL, with 10 dB pad
<b>NOISE</b>	13 dB SPL
<b>DYNAMIC RANGE (typical)</b>	128 dB, 1 kHz at Max SPL
<b>SIGNAL-TO-NOISE RATIO</b>	81 dB, 1 kHz at 1 Pa
<b>PHANTOM POWER REQUIREMENTS</b>	48V DC, 4.6 mA typical
<b>SWITCHES</b>	Flat, roll-off; 10 dB pad (nominal)
<b>WEIGHT (less cable and accessories)</b>	136 g
<b>DIMENSIONS</b>	395.0 mm long, 21.0 mm diameter
<b>OUTPUT CONNECTOR</b>	Integral 3-pin XLRM-type
<b>ACCESSORIES FURNISHED</b>	AT8405a stand clamp for 5/8"-27 threaded stands; AT8145 windscreens; two o-rings; 5/8"-27 to 3/8"-16 threaded adapter; protective carrying case



# BP4071

## 超指向性电容话筒



- 专为广播、影视制作和电影拍摄的音频收音而设计。
- 直接耦合式平衡输出，高收音灵敏度而不受风声等杂音影响。
- 创新的声学设计，相同窄角度的超指向性能下，提供多50%长度的收音效果。
- 坚固的外壳结构，以轻量铝合金构造。
- 无变压器的输出设计，可提供宽程的清晰收音。
- 设有80Hz高通滤波和10dB衰减开关。

BP4071需要使用48V幻象供电工作，可使用专业调音台上的幻象电源，也可以使用鐵三角的AT8801单通道或AT8506四通道幻象电源供电作独立供电。

低阻抗的平衡音频输出，话筒音频信号最终以卡农公头的2号及3号针脚输出，而1号针脚则为地线(屏蔽)连接。输出相位将以正相位电平设于2号针脚上。

为洵免出现相位相互抵消而失真的情况，所有话筒连接时，接线必需以1-1, 2-2, 3-3型式把针脚连接。

内置高通滤波电路，可轻易由平直的频率响应，开启为于80 Hz以下衰减的收音效果，应用高通滤波器可减低话筒在近距离讲话收音时的喷气声，并可减低收音环境中低频噪声(如外间汽车引擎声，空调系统的风声等)，房间中的回声及机械性的震动声。

BP4071话筒同并有10dB衰减开关，在高声压环境收音时，减低话筒的灵敏度，避免破声的失真现象出现。

话筒符合RoHS规格，在构造上不含有欧盟禁用的危害性物质。

把话筒暴露于高温中可能导致输出电平逐渐及永久性减弱，应避免将话筒留在日晒的地方或长时间置于温度超过43°C的地方，而极高湿度也应避免。

### 技术指标

收音头	直流偏压电容式
指向特性	超指向性
频率响应	20-20,000 Hz
高通滤波	80 Hz, 12 dB/octave
开通灵敏度	-29 dB (35.5 mV) 以1V于1 Pa
输出阻抗	50 欧姆
最大承受声压	141 dB 声压, 1 kHz 于 1% T.H.D. 151 dB 声压 于 10dB 衰减
噪音	13 dB 声压
动态范围 (典型)	128 dB, 1 kHz 于最高声压
讯噪比	81 dB, 1 kHz 于 1 Pa
幻像供电	直流 48V, 耗电 4.6mA 典型
开关	平直 / 高通滤波; 10dB 衰减
重量	136 g
外形尺寸	395.0 mm 长, 21.0 mm 直径
输出连接器	内置 XLRM-3针卡农公头
附属品	AT8405a 1/2"-27接头转轴式支架; AT8145海棉防风罩; 1/4"-27至1/8"-16接头; 圆型环2个; 保护袋

