

# BP4071

## Line + Gradient Condenser Microphone

 audio-technica

broadcast & production microphones



### Features

- **Designed for critical long-distance pickup in broadcasting, film/TV production and theater sound reinforcement applications**
- **Innovative acoustic design provides the same directivity as mics up to 50% longer**
- **Direct-coupled, balanced output ensures a clean signal even in high-output conditions**
- **Transformerless design for improved pickup of transients**
- **Rugged housing made of lightweight structural-grade aluminum alloy**
- **Integral 80 Hz high-pass filter switch and 10 dB pad switch**

### Description

The BP4071 is an externally polarized (DC bias) condenser microphone with a line + gradient polar pattern. It is designed for use in professional recording, broadcasting, film/TV/video production, wildlife recording, high-quality sound reinforcement and other demanding applications.

The microphone requires 48V phantom power for operation.

The microphone's highly directional polar pattern provides a narrow acceptance angle along with crisp, intelligible audio reproduction desirable for long-distance sound pickup.

The output of the microphone is a 3-pin XLRM-type connector.

The microphone is equipped with a switchable 10 dB pad and a switch that permits choice of flat response or low-frequency roll-off (via integral 80 Hz high-pass filter).

The microphone is enclosed in a rugged aluminum alloy housing. The included AT8405a stand clamp permits mounting on any microphone stand with  $\frac{5}{8}$ "-27 threads. A windscreen, two o-rings and a protective carrying case are also included.

### Operation and Maintenance

The BP4071 requires 48V phantom power for operation.

Output 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. To engage the high-pass filter, use the end tip of a paperclip or other small pointed instrument to slide the switch toward the "bent" line.

The microphone is also equipped with a switchable 10 dB pad that lowers the microphone's sensitivity, thus providing higher SPL capability for flexible use with a wide range of users 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.

**Note:** To use the microphone with a camera-mount microphone holder whose diameter is too large to secure the microphone, slide the two supplied o-rings onto the microphone handle, spaced so that one fits just in front of, and the other fits just behind, the rubber nubs inside the microphone holder. When the top of the microphone holder is closed and tightened down, the o-rings should hold the microphone securely in place.

To reduce the environmental impact of a multi-language printed document, product information is available online at [www.audio-technica.com](http://www.audio-technica.com) in a selection of languages.

Afin de réduire l'impact sur l'environnement de l'impression de plusieurs langues, les informations concernant les produits sont disponibles sur le site [www.audio-technica.com](http://www.audio-technica.com) dans une large sélection de langues.

Para reducir el impacto al medioambiente, y reducir la producción de documentos en varios leguajes, información de nuestros productos están disponibles en nuestra página del Internet: [www.audio-technica.com](http://www.audio-technica.com).

Para reduzir o impacto ecológico de um documento impresso de várias línguas, a Audio-Technica providência as informações dos seus produtos em diversas línguas na [www.audio-technica.com](http://www.audio-technica.com).

Per evitare l'impatto ambientale che la stampa di questo documento determinerebbe, le informazioni sui prodotti sono disponibili online in diverse lingue sul sito [www.audio-technica.com](http://www.audio-technica.com).

Der Umwelt zuliebe finden Sie die Produktinformationen in deutscher Sprache und weiteren Sprachen auf unserer Homepage: [www.audio-technica.com](http://www.audio-technica.com).

Om de gevolgen van een gedrukte meertalige handleiding op het milieu te verkleinen, is productinformatie in verschillende talen "on-line" beschikbaar op: [www.audio-technica.com](http://www.audio-technica.com).

本公司基於減少對環境的影響，將不作多語言文件的印刷，有關產品訊息可在 [www.audio-technica.com](http://www.audio-technica.com) 的官方網頁上選擇所屬語言及瀏覽。

本公司基于减少对环境的影响，将不作多语言文档的印刷，有关产品信息可在 [www.audio-technica.com](http://www.audio-technica.com) 的官方网页上选择所属语言和浏览。

자원절약, 환경보호를 위해 국문 사용 설명서는 인쇄하지 않았습니다.  
제품정보는 [www.audio-technica.com](http://www.audio-technica.com) 에서 원하는 언어 선택 후에 다운로드 받으실 수 있습니다.

## Specifications

<b>Element</b>	Externally polarized (DC bias) condenser
<b>Polar pattern</b>	Line + gradient
<b>Frequency response</b>	20-20,000 Hz
<b>Low frequency roll-off</b>	80 Hz, 18 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 (nominal)
<b>Noise<sup>1</sup></b>	13 dB SPL
<b>Dynamic range (typical)</b>	128 dB, 1 kHz at Max SPL
<b>Signal-to-noise ratio<sup>1</sup></b>	81 dB, 1 kHz at 1 Pa
<b>Phantom power requirements</b>	48V DC, 4.8 mA typical
<b>Switches</b>	Flat, roll-off; 10 dB pad (nominal)
<b>Weight</b>	136 g (4.8 oz)
<b>Dimensions</b>	395.0 mm (15.55") long, 21.0 mm (0.83") diameter
<b>Output connector</b>	Integral 3-pin XLRM-type
<b>Audio-Technica case style</b>	SG3
<b>Accessories furnished</b>	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.

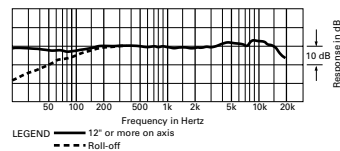
1 Pascal = 10 dynes/cm<sup>2</sup> = 10 microbars = 94 dB SPL

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

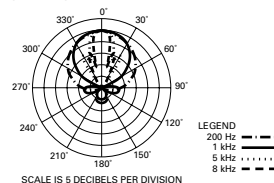
Specifications are subject to change without notice.



frequency response: 20–20,000 Hz



polar pattern



 **audio-technica**

Audio-Technica Corporation  
[audio-technica.com](http://audio-technica.com) ©2016 Audio-Technica

P52075-01