

MICROPHONE



- Designed for broadcasters, videographers and sound recordists
- Compact, lightweight design is perfect for camera-mount use
- Independent line-cardioid and figure-of-eight condenser elements
- Switchable low-frequency roll-off
- Switch selection of non-matrixed M-S mode and two internally-matrixed left/right stereo modes

MID-SIDE OPERATION: In M-S mode, the BP4029 provides independent Mid and Side signals. This allows the width of the stereo image to be adjusted in post production or in the field with a matrix mixer.

MATRIXED STEREO: The BP4029 offers two internally-matrixed modes which provide traditional "left-right" stereo without the need for external mixers. To accommodate varying acoustic environments, the user may select between a "wide" pattern (LR-W) with increased ambient pickup, and a "narrow" pattern (LR-N) which offers more rejection and less ambience. Output phase is "Pin 2 hot."

For correct left-right stereo orientation, position the microphone so the word "UP" is on top, with the switches on the bottom. In all modes, locating the BP4029 nearer the sound source enhances the apparent width of the stereo image, while decreasing room ambience. Moving away from the sound source will result in a narrower stereo image and more "room sound."

M-S O	utput Connector	<u>Pin 1</u>	<u>Pin 2</u>	<u>Pin 3</u>
	XLR3M-Gray	Ground	Mid +	Mid –
	XLR5M Mic Connector:	<i>Pin 1</i>	<i>Pin 2</i>	<i>Pin 3</i>
Side	XLR3M-Red	Ground	Side +	Side –
	XLR5M Mic Connector:	Pin 1	Pin 4	<i>Pin 5</i>
<u>Matrix</u> Left	Output Connector XLR3M-Gray XLR5M Mic Connector:	<u>Pin 1</u> Ground <i>Pin 1</i>	<u>Pin 2</u> L + <i>Pin 2</i>	<u>Pin 3</u> L – <i>Pin 3</i>
Right	XLR3M-Red	Ground	R +	R –
	XLR5M Mic Connector:	Pin 1	<i>Pin 4</i>	<i>Pin 5</i>

The BP4029 requires 11V to 52V DC phantom power on both XLR3M connectors. Wiring must be balanced throughout, and all mic cables in the system must be wired consistently: Pin 1-to-Pin 1, etc. If connecting to unbalanced inputs, good-quality balanced line transformers <u>must</u> be used.

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

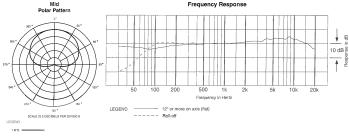
Avoid leaving the microphone in the open sun or in areas where temperatures exceed 110° F (43° C) for extended periods. Extremely high humidity should also be avoided.

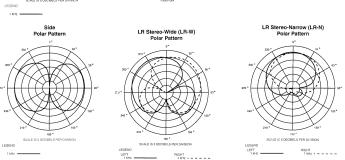
Note: To use the BP4029 with a camera-mount microphone holder whose diameter is too large to secure the microphone:

- Slide the two supplied O-Rings onto the microphone handle.
- Position the O-Rings on either side of the rubber nubs inside the microphone holder, so that one O-Ring fits snuggly in front of the mic holder's interior nubs, and the other O-Ring fits snuggly behind them. Close & tighten down the top of the microphone holder.
- The O-Rings should now hold the microphone securely in place.

BP4029 SPECIFICATIONS [†]				
ELEMENTS	Fixed-charge back plate permanently polarized condenser			
POLAR PATTERNS	Line-cardioid and figure-of-eight			
FREQUENCY RESPONSE	40-20,000 Hz			
LOW FREQUENCY ROLL-OFF	80 Hz, 12 dB/octave			
OPEN CIRCUIT SENSITIVITY (Mid / Side / LR Stereo)	-30 dB (31.6 mV) / -34 dB (19.9 mV) / -36 dB (15.8 mV) re 1V at 1 Pa*			
IMPEDANCE	200 ohms			
MAXIMUM INPUT SOUND LEVEL (Mid / Side / LR Stereo)	123 dB / 127 dB / 126 dB SPL, 1 kHz at 1% T.H.D.			
DYNAMIC RANGE (typical) (Mid / Side / LR Stereo)	101 dB / 101 dB / 102 dB, 1 kHz at Max SPL			
SIGNAL-TO-NOISE RATIO¹ (Mid / Side / LR Stereo)	72 dB / 68 dB / 70 dB, 1 kHz at 1 Pa*			
PHANTOM POWER REQUIREMENTS	11-52V DC, 4 mA typical at 48V, each channel			
SWITCHES	M-S, LR Stereo-Wide (LR-W), LR Stereo-Narrow (LR-N); Flat, roll-off			
WEIGHT (less cable and accessories) 103 g (3.6 oz)				
DIMENSIONS	236.0 mm (9.29") long, 21.0 mm (0.83") diameter			
OUTPUT CONNECTOR	Integral XLR5M-type			
CABLE	Dual 0.61 m (24") shielded two-conductor, terminated in two XLR3M-type connectors			
ACCESSORIES FURNISHED	AT8405a stand clamp for 5/s"-27 threaded stands; AT8134 foam windscreen; 5/s"-27 to 3/s"-16 threaded adapter; 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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