

BP4025

X/Y Stereo Microphone



Features

- **Designed for professional broadcast and recording, and field use**
- **Large-diaphragm capsules offer pristine sound quality and exceptionally low noise**
- **Innovative coincident capsule configuration produces accurate stereo image in smaller housing**
- **Compact, lightweight design is ideal for camera-mount use**
- **Excellent channel separation**
- **Phantom power operation—for use with professional equipment**
- **Includes one balanced cable (two 3-pin XLRM-type connectors at output)**
- **Integral 80 Hz high-pass filter switch and 10 dB pad switch**

Description

The BP4025 is a fixed-charge condenser microphone with an X/Y stereo polar pattern. It is designed for professional broadcast and recording, and field use.

The microphone requires 11V to 52V phantom power for operation.

The microphone offers large-diaphragm capsules in an innovative coincident capsule configuration. This allows for a smaller housing while producing an X/Y stereo image with the spatial impact and realism of a live sound field.

The microphone includes a 5 m (16.5') output cable terminating in a 5-pin XLRF-type and two 3-pin XLRM-type connectors. The output of the microphone is a 5-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 housing. The included AT8405a stand clamp permits mounting on any microphone stand with $\frac{5}{8}$ "-27 threads. A windscreen and a soft protective pouch are also included.

Operation and Maintenance

The BP4025 requires 11V to 52V phantom power for operation.

Output for each stereo channel is low impedance (Lo-Z) balanced. The balanced signals appear across Pins 2 and 3 for the left channel, Pins 4 and 5 for the right channel. Pin 1 is ground (shield) for both channels. Output is "Pins 2 and 4 hot"—positive acoustic pressure produces positive voltage at Pins 2 and 4.

The end of the grille should be aimed at the sound source with the top of the microphone facing up (the top of the microphone is indicated by

the left-right stereo image printed on the housing), so the stereo image matches the sound source.

Locating the microphone nearer the sound source enhances the width of the stereo image, while decreasing room ambience. Conversely, as the mic position moves away from the sound source, a narrower left/right stereo image results and more of the "room sound" is noted.

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, slide the switch toward to "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 for a wide range of speakers/performers and system configurations. To engage the 10 dB pad, 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.

Architect's and Engineer's Specifications

The microphone shall be a fixed-charge stereo condenser. It shall have an X/Y stereo polar pattern and a frequency response of 20 Hz to 17,000 Hz. The microphone shall operate from an external 11V to 52V DC phantom power source. It shall be capable of handling sound input levels up to 145 dB (155 dB with 10 dB pad) with a dynamic range of 131 dB. Nominal open-circuit output voltage shall be 25.1 mV at 1V, 1 Pascal. Output shall be low impedance balanced (170 ohms).

The output of the microphone shall be a 5-pin XLRM-type connector. A 5 m (16.5') cable with a 5-pin XLRF-type and two 3-pin XLRM-type connectors shall be included. The microphone shall be equipped with a switchable 10 dB pad and a switch that permits choice of flat response or 80 Hz low-frequency roll-off.

The microphone shall be 186.0 mm (7.32") long and have a maximum head diameter of 47.6 mm (1.87"). Weight shall be 269 grams (9.5 oz). The microphone shall include a stand clamp, a windscreen and a soft protective pouch.

The Audio-Technica BP4025 is specified.

Specifications

Element	Fixed-charge back plate, permanently polarized condenser
Polar pattern	X/Y Stereo
Frequency response	20-17,000 Hz
Low frequency roll-off	80 Hz, 12 dB/octave
Open circuit sensitivity	-32 dB (25.1 mV) re 1V at 1 Pa
Channel balance	<2.5 dB
Impedance	170 ohms
Maximum input sound level	145 dB SPL, 1 kHz at 1% T.H.D. 155 dB SPL, with 10 dB pad (nominal)
Dynamic range (typical)	131 dB, 1 kHz at Max SPL
Signal-to-noise ratio¹	80 dB, 1 kHz at 1 Pa
Phantom power requirements	11-52V DC, 7 mA typical (both channels total)
Switches	Flat, roll-off; 10 dB pad (nominal)
Weight	269 g (9.5 oz)
Dimensions	186.0 mm (7.32") long, 47.6 mm (1.87") maximum head diameter, 21.0 mm (0.83") body diameter
Output connector	Integral 5-pin XLRM-type
Cable	5.0 m (16.5') long, 8 conductor, shielded, vinyl-jacketed stereo cable with 5-pin XLRM-type connector at microphone end and two 3-pin XLRM-type connectors at output end
Audio-Technica case style	S12
Accessories furnished	AT8405a stand clamp for 5/8"-27 threaded stands; windscreen; 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.

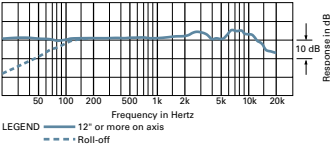
1 Pascal = 10 dynes/cm² = 10 microbars = 94 dB SPL

¹ Typical, A-weighted, using Audio Precision System One.

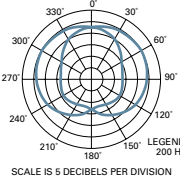
Specifications are subject to change without notice.



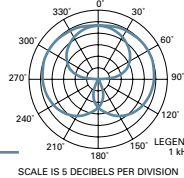
frequency response: 20–17,000 Hz



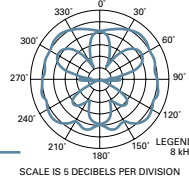
polar pattern (200 Hz)



polar pattern (1 kHz)



polar pattern (8 kHz)



Audio-Technica U.S., Inc., 1221 Commerce Drive, Stow, Ohio 44224
 Audio-Technica Limited, Old Lane, Leeds LS11 8AG England
 ©2010 Audio-Technica U.S., Inc. audio-technica.com