

# AT8022 X/Y STEREO MICROPHONE



- Designed for broadcast and professional recording
- Unique coincident capsule configuration produces accurate stereo image in smaller housing
- Ideal for use with hand-held digital recording devices
- Compact, lightweight design is perfect for video camera-mount use as well as for stereo field recording, interviews and home recording
- Switchable low-frequency roll-off
- Operates on battery or phantom power

The AT8022 requires 11- 52V DC phantom power, or a 1.5V AA battery for operation. A battery need not be in place for phantom power operation. (Use battery power only when connecting the AT8022 to an unbalanced input.)

Battery installation: Unscrew the lower section of the microphone body to reveal the battery compartment. Insert a fresh 1.5V AA battery in the handle compartment ("+" end up), then reassemble the microphone. Alkaline batteries are recommended for longest life. Remove the battery during long-term storage. Battery switch must be "on" for battery operation. Turn off when not in use to preserve battery life. Battery switch has no effect on phantom power 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.

Two cables are provided: one balanced cable (5-pin XLR-type to two 3-pin XLRM-type) and one unbalanced cable (5-pin XLR-type to 3.5 mm TRS). **NOTE: Use battery power only when connecting the AT8022 to an unbalanced input.**

Locating the AT8022 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 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 high sensitivity of the AT8022 assures useful output and an excellent match to most inputs. However, the microphone's high output may overload some sensitive electronic input stages under some conditions. Many pre-amps and mixers include a mic pad or input attenuator control to prevent overload.

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.

## AT8022 SPECIFICATIONS†

<b>ELEMENT</b>	Fixed-charge back plate permanently polarized condenser
<b>CHANNEL BALANCE</b>	<2.5 dB
<b>POLAR PATTERN</b>	X/Y Stereo
<b>FREQUENCY RESPONSE</b>	20-15,000 Hz
<b>LOW FREQUENCY ROLL-OFF</b>	80 Hz, 12 dB/octave
<b>OPEN CIRCUIT SENSITIVITY</b> (Phantom / Battery)	-38 dB (12.5 mV) / -38 dB (12.5 mV) re 1V at 1 Pa*
<b>IMPEDANCE</b> (Phantom / Battery)	250 ohms / 300 ohms
<b>MAXIMUM INPUT SOUND LEVEL</b> (Phantom / Battery)	128 dB / 120 dB SPL, 1 kHz at 1% T.H.D.
<b>DYNAMIC RANGE</b> (typical) (Phantom / Battery)	109 dB / 101 dB, 1 kHz at Max SPL
<b>SIGNAL-TO-NOISE RATIO†</b>	75 dB, 1 kHz at 1 Pa*
<b>PHANTOM POWER REQUIREMENTS</b>	11-52V DC, 2 mA typical (each channel)
<b>BATTERY TYPE</b>	1.5V AA/UM3
<b>BATTERY CURRENT / LIFE</b>	0.7 mA / 700 hours typical (alkaline)
<b>SWITCHES</b>	Battery On/Off; Flat, roll-off
<b>WEIGHT</b> (less cable and accessories)	247 g (8.7 oz)
<b>DIMENSIONS</b>	186.0 mm (7.32") long, 47.6 mm (1.87") head diameter, 21.0 mm (0.83") maximum body diameter
<b>OUTPUT CONNECTOR</b>	Integral 5-pin XLRM-type

## CABLES

Balanced: 2.0 m (6.5') long, 8 conductor, shielded, vinyl-jacketed stereo cable with 5-pin XLR-type connector at microphone end and two 3-pin XLRM-type connectors at output end;  
Unbalanced: 0.6 m (2.0') long stereo cable with 5-pin XLR-type connector at microphone end and 3.5 mm TRS connector at output end

## ACCESSORIES FURNISHED

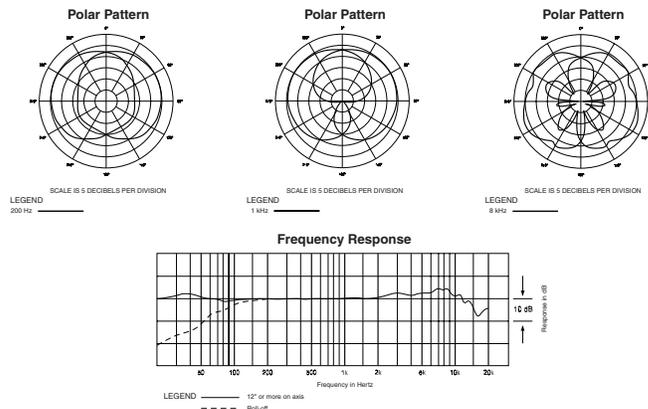
AT8405a stand clamp for 5/8"-27 threaded stands; windscreen; battery; soft protective pouch

†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/cm<sup>2</sup> = 10 microbars = 94 dB SPL

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

Specifications are subject to change without notice.



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