

AT815ST STEREO SHOTGUN 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 AT815ST provides independent Mid and Side signals. This allows the Mid-Side balance to be adjusted as desired at the recording desk or mixing electronics, reducing the amount of equipment necessary in the field.

MATRIXED STEREO: The AT815ST offers two internally-matrixed modes which provide traditional "left-right" stereo. 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 AT815ST 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 Output	Connector	Pin 1	Pin 2	Pin 3
Mid	XLR3M-Gray	Ground	Mid +	Mid -
	XLR5M Mic Connector:	Pin 1	Pin 2	Pin 3
Side	XLR3M-Red	Ground	Side +	Side -
	XLR5M Mic Connector:	Pin 1	Pin 4	Pin 5
Matrix Output	Connector	Pin 1	Pin 2	Pin 3
Left	XLR3M-Gray	Ground	Mid +	Side -
	XLR5M Mic Connector:	Pin 1	Pin 2	Pin 3
Right	XLR3M-Red	Ground	Mid +	Side +
	XLR5M Mic Connector:	Pin 1	Pin 4	Pin 5

The AT815ST requires 11V to 52V DC phantom power on Pins 2 and 3 of 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 must be used.

The high sensitivity of the AT815ST 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; or, use an AT8202 attenuator or equal at the input.

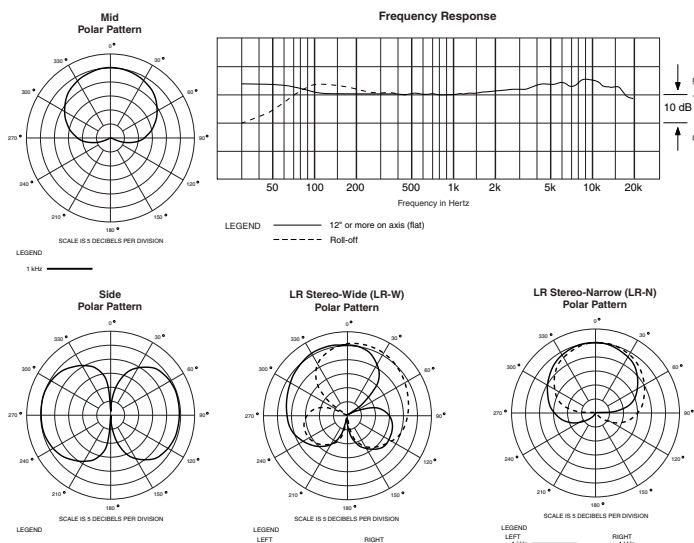
Avoid leaving the microphone in the open sun or in areas where temperatures exceed 110° F (43° C) for extended periods. Extremely high humidity should also be avoided.

AT815ST SPECIFICATIONS†

ELEMENTS	Fixed-charge back plate permanently polarized condenser
POLAR PATTERNS	Line-cardioid and figure-of-eight
FREQUENCY RESPONSE	30-20,000 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.
SIGNAL-TO-NOISE RATIO¹ (Mid / Side / LR Stereo)	72 dB / 68 dB / 70 dB SPL, 1 kHz at 1 Pa*
DYNAMIC RANGE (typical) (Mid / Side / LR Stereo)	101 dB / 101 dB / 102 dB, 1 kHz at Max SPL
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 accessories)	5.0 oz (142 g)
DIMENSIONS	14.96" (380.0 mm) long, 0.83" (21.0 mm) diameter
OUTPUT CONNECTOR	Integral XLR5M-type
CABLE	Dual 24" (0.61 m) shielded two-conductor, terminated in two XLR3M-type connectors
ACCESSORIES FURNISHED	AT8405a stand clamp for 5/8"-27 threaded stands; AT8135 foam windscreen; 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
¹ Typical, A-weighted, using Audio Precision System One.
Specifications are subject to change without notice.



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

P51655-01-EN ©2004 Audio-Technica U.S., Inc. Printed in Japan