## CARDIOID CONDENSER **ATM71**0 VOCAL MICROPHONE

- · Tailored for exacting detail, high-fidelity vocal reproduction with maximum impact and intelligibility
- Excels in venues with controlled stage volume or in-ear monitoring
- Cardioid polar pattern reduces pickup of sounds from the sides and rear, improving isolation of desired sound source
- Durable performance for professional applications
- · Superior anti-shock engineering for low handling noise
- Multi-stage grille design offers excellent protection against plosives and sibilance without compromising high-frequency clarity
- Condenser design for studio-quality performance
- Integral 80 Hz HPF switch and 10 dB pad
- Corrosion-resistant contacts from gold-plated XLRM-type connector
- Rugged, all-metal design and construction for years of trouble-free use

The ATM710 is intended for use in professional applications where remote power is available. It requires 11V to 52V DC phantom power, which may be provided by a mixer or console, or by a separate, in-line source such as the Audio-Technica AT8801 singlechannel or CP8506 four-channel phantom power supplies.

Output from the microphone's XLRM-type connector 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.

When using the ATM710 in settings with a stage monitor speaker, the speaker should be located  $180^\circ$  off axis (at rear of the microphone). This placement, in conjunction with the microphone's uniform cardioid pickup pattern, will virtually eliminate the possibility of undesired audio feedback.

An integral 80 Hz hi-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 ATM710 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 performers and system configurations.

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

ELEMENT	Fixed-charge back plate permanently polarized condenser
POLAR PATTERN	Cardioid
FREQUENCY RESPONSE	40-20,000 Hz
LOW FREQUENCY ROLL-OFF	80 Hz, 12 dB/octave
OPEN CIRCUIT SENSITIVITY	–40 dB (10.0 mV) re 1V at 1 Pa*
IMPEDANCE	200 ohms
MAXIMUM INPUT SOUND LEVEL	148 dB SPL, 1 kHz at 1% T.H.D.
DYNAMIC RANGE (typical)	127 dB, 1 kHz at Max SPL
SIGNAL-TO-NOISE RATIO <sup>1</sup>	73 dB, 1 kHz at 1 Pa*
PHANTOM POWER REQUIREMENTS	11-52V DC, 3.5 mA typical
SWITCHES	Flat, roll-off; 10 dB pad
WEIGHT	274 g (9.7 oz)
DIMENSIONS	179.0 mm (7.05") long, 50.0 mm (1.97") diameter
OUTPUT CONNECTOR	Integral 3-pin XLRM-type
ACCESSORIES FURNISHED	AT8470 Quiet-Flex <sup>th</sup> stand clamp for <sup>5</sup> / <sub>8</sub> <sup>th</sup> -27 threaded stands; <sup>5</sup> / <sub>8</sub> <sup>th</sup> -27 to <sup>3</sup> / <sub>8</sub> <sup>th</sup> -16 threaded adapter; soft protective pouch

ARTIST SERIES

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.





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