



Features

- **Wide-range condenser element with low-mass diaphragm for superior performance**
- **Uniform cardioid polar pattern for maximum rejection of unwanted sounds**
- **Self-contained electronics eliminate need for external power module**
- **Rugged design and construction for reliable performance**
- **Low-profile design for minimum visibility**

Description

The PRO 44 is a wide-range miniature condenser microphone with a cardioid polar pattern. It is designed for surface-mount applications such as high-quality sound reinforcement and other demanding sound pickup situations.

The microphone requires 9V to 52V phantom power for operation.

The microphone's cardioid polar pattern provides a 120° angle of acceptance (cardioid in hemisphere above mounting surface).

The microphone includes a 7.6 m (25') output cable terminating in TA3F-type and XLRM-type connectors.

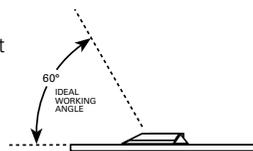
The microphone's rubber non-slip bottom pad minimizes mechanical coupling of surface vibration to the microphone. The microphone is enclosed in a rugged housing with a black finish.

Installation and Operation

The PRO 44 requires 9V to 52V phantom power for operation.

Output 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.

The microphone should be placed on a flat, unobstructed mounting surface, with the front of the microphone facing the sound source. The sound source should not be below, or higher than 60° above, the plane of the mounting surface.



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

Architect's and Engineer's Specifications

The microphone shall be a fixed-charge condenser designed for use in surface-mount applications. It shall have a cardioid polar pattern with a uniform 120° angle of acceptance (cardioid in hemisphere above mounting surface) and a frequency response of 70 Hz to 16,000 Hz. The microphone shall operate from an external 9V to 52V DC phantom power source. It shall be capable of handling sound input levels up to 114 dB with a dynamic range of 86 dB. Nominal open-circuit output voltage shall be 56.2 mV at 1V, 1 Pascal. Output shall be low impedance balanced (100 ohms).

The microphone shall incorporate self-contained electronics, eliminating the need for an external power module. The microphone shall have a 7.6 m (25') output cable with TA3F-type to XLRM-type connectors.

The microphone shall have a maximum width of 73.0 mm (2.87"), a maximum length of 90.5 mm (3.56") and a maximum height of 15.5 mm (0.59"). Weight shall be 67 grams (2.4 oz). Finish shall be low-reflectance black.

The Audio-Technica PRO 44 is specified.

Specifications

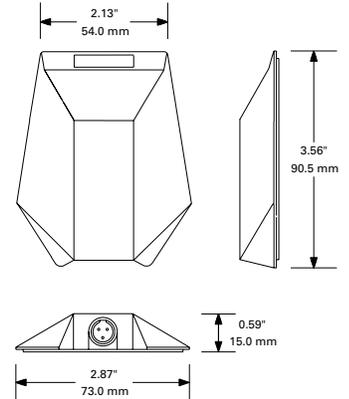
Element	Fixed-charge back plate, permanently polarized condenser
Polar pattern	Half-cardioid (cardioid in hemisphere above mounting surface)
Frequency response	70-16,000 Hz
Open circuit sensitivity	-25 dB (56.2 mV) re 1V at 1 Pa
Impedance	100 ohms
Maximum input sound level	114 dB SPL, 1 kHz at 1% T.H.D.
Dynamic range (typical)	86 dB, 1 kHz at Max SPL
Signal-to-noise ratio¹	66 dB, 1 kHz at 1 Pa
Phantom power requirements	9-52V, 2 mA typical
Weight	67 g (2.4 oz)
Dimensions	90.5 mm (3.56") maximum length, 73.0 mm (2.87") maximum width, 15.0 mm (0.59") maximum height
Output connector	TB3M-type
Cable	7.6 m (25') long, 2.6 mm (0.10") diameter, 2-conductor, shielded cable with TA3F-type and XLRM-type connectors

In the interest of standards development, A.T.U.S. offers full details on its test methods to other industry professionals on request.

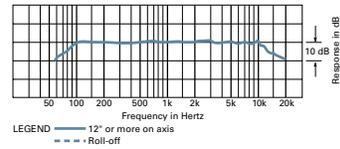
1 Pascal = 10 dynes/cm² = 10 microbars = 94 dB SPL

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

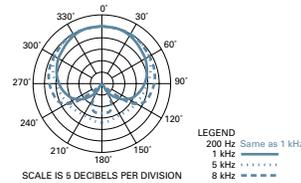
Specifications are subject to change without notice.



frequency response: 70 – 16,000 Hz



polar pattern



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