

PRO 35

Cardioid Condenser Clip-on Instrument Microphones

pro series live sound microphones



Features

- **Attaches to reeds, brass, upright bass, toms and other percussion**
- **Excels in high-SPL applications and is ideal for active stage performances**
- **Low-profile design for minimum visibility**
- **Extended frequency response captures subtle nuances of the performance**
- **Cardioid polar pattern reduces pickup of sounds from the sides and rear, improving isolation of desired sound source**
- **UniMount® clip permits accurate positioning, provides shock resistance and protects element**
- **Switchable 80 Hz high-pass filter minimizes pickup of undesired low-frequency sounds**
- **Also available in a wireless model, PRO 35cW**

PRO 35 Description

The PRO 35 is a fixed-charge clip-on condenser microphone with a cardioid polar pattern. It is designed for use in professional live-sound and studio applications.

When used with the included instrument mount, it provides accurate, consistent pickup of reeds, brass and percussion.

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

The cardioid polar pattern of the microphone is more sensitive to sound originating directly in front of the element, making it useful for controlling feedback and reducing pickup of unwanted sounds.

The microphone includes a 1.8 m (6') permanently attached miniature cable. Its free end connects to the provided AT8538 power module via a TA3F-type connector. The output of the power module is a 3-pin XLRM-type connector.

A switch in the power module permits choice of flat response or low-frequency roll-off (via integral 80 Hz high-pass filter) to help control undesired ambient noise.

The microphone is enclosed in a rugged housing with a low-reflectance black finish. A power module, an instrument mount and a soft protective pouch are included.

PRO 35cW Description

The microphone is also available in a wireless model, the PRO 35cW. The PRO 35cW features a 1.4 m (55") miniature cable terminated with a locking 4-pin connector for use with Audio-Technica UniPak® body-pack transmitters. No power module is included (or required) with the

PRO 35cW. The PRO 35cW dimensions, polar pattern and included instrument mount are identical to those of the PRO 35.

Operation and Maintenance

The PRO 35 requires 11V 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.

To avoid phase cancellation and poor sound, all mic cables must be wired consistently: Pin 1-to-Pin 1, etc.

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 the "bent" line.

The included UniMount® instrument mount entirely surrounds the microphone with foam to isolate the microphone from noise transmitted from the instrument, shield the element against accidental damage, and provide an efficient wind screen. The flexible arm permits aiming the microphone in any direction, while a cable strain relief reduces cable-transmitted noise and cable damage. The rubber grip spring clamp securely holds the microphone to the instrument without marring the surface.

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 condenser. It shall have a cardioid polar pattern with a uniform 120° angle of acceptance and a frequency response of 50 Hz to 15,000 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 with a dynamic range of 115 dB. Nominal open-circuit output voltage shall be 5.6 mV at 1 V, 1 Pascal. Output shall be low impedance balanced (250 ohms).

The microphone shall have a 1.8 m (6') permanently attached miniature cable terminating in a TA3F-type output connector. The output connector shall connect to a TB3M-type jack on the included power module. The power module shall contain a switch that permits a choice of flat response or 80 Hz low-frequency roll-off. The output of the power module shall be a 3-pin XLRM-type connector.

The microphone shall be 25.0 mm (0.98") long and have a diameter of 10.2 mm (0.40"). Weight shall be 8 grams (0.3 oz) without cable. The microphone shall include a power module, an instrument mount and a soft protective pouch.

The microphone shall also be available in a wireless model with a 1.4 m (55") miniature cable terminated with a locking 4-pin connector for use with Audio-Technica UniPak® body-pack transmitters. No power module shall be required or included with the wireless model. The wireless model dimensions, polar pattern, and included instrument mount shall be identical to those of the wired model.

The Audio-Technica PRO 35 [PRO 35cW-wireless] is specified.

Specifications

Element	Fixed-charge back plate, permanently polarized condenser
Polar pattern	Cardioid
Frequency response	50-15,000 Hz
Low frequency roll-off	80 Hz, 18 dB/octave
Open circuit sensitivity	-45 dB (5.6 mV) re 1V at 1 Pa
Impedance	250 ohms
Maximum input sound level	145 dB SPL, 1 kHz at 1% T.H.D.
Dynamic range (typical)	115 dB, 1 kHz at Max SPL
Signal-to-noise ratio¹	64 dB, 1 kHz at 1 Pa
Phantom power requirements	11-52V DC, 2 mA typical
Switch	Flat, roll-off
Weight	Microphone: 8 g (0.3 oz) Power module: 81 g (2.9 oz)
Dimensions	Microphone: 25.0 mm (0.98") long, 10.2 mm (0.40") diameter Power module: 92.9 mm (3.66") long, 18.9 mm (0.74") diameter
Output connector	Integral 3-pin XLRM-type
Cable	1.8 m (6.0') long (permanently attached to microphone), 2.6 mm (0.10") diameter, 2-conductor, shielded cable with TA3F-type connector
Audio-Technica case style	M12
Accessories furnished	AT8538 power module; AT8418 UniMount® microphone instrument mount; 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.

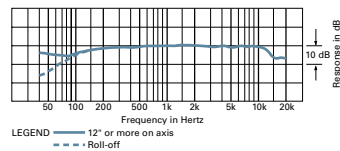
1 Pascal = 10 dynes/cm² = 10 microbars = 94 dB SPL

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

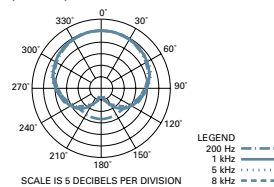
Specifications are subject to change without notice.



frequency response: 50 – 15,000 Hz



polar pattern



 **audio-technica**

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