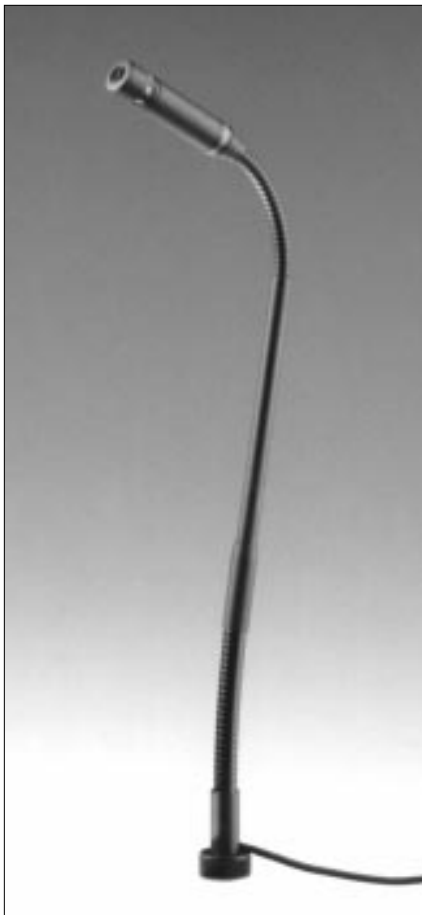


PRO47T and PRO47TL

REMOTE-POWERED CARDIOID CONDENSER THREAD-MOUNT GOOSENECK MICROPHONES

ProPoint®

M I C R O P H O N E S



Description

The PRO47T is a wide-range condenser microphone with a cardioid (unidirectional) polar pattern. It was designed for high-quality sound reinforcement and other demanding sound pickup situations. Standing 12.40" above the mounting surface, its small-diameter alternating gooseneck design permits highly flexible positioning while maintaining a smooth, well-contoured appearance. The PRO47TL is a 15.79" version of this microphone.

The PRO47T features a 9.8' (3.0 m) permanently-attached miniature cable with an XLRM-type connector, which allows it to be plugged directly into an XLRF-type jack or cable connector. The unit's integral electronics can be powered from any external 9V to 52V DC phantom power source.

Audio-Technica design engineers have utilized the newest low-mass technology in the quest for superior performance. The charge is now on the fixed back plate, rather than the moving element. With the A-T fixed-charge "back plate" construction, a gold-vaporized diaphragm just 2 microns thick (about 0.000079") can be used. This reduces moving mass substantially, improving frequency response and transient response while reducing distortion.

The microphone element is enclosed in a rugged housing with a low-reflectance black finish. A 5/8"-27 threaded flange allows the microphone to mate with the threads of a standard microphone desk or floor stand. A 5/8"-27 threaded stud is also provided so it can be secured to a permanent mounting surface.

Operation and Maintenance

Output is low impedance balanced. The output connector mates with XLRF-type connectors. The balanced signal appears across Pins 2 and 3, while the ground (shield) connection is Pin 1. Output is phased so that positive acoustic pressure produces positive voltage at Pin 2 in accordance with industry convention.

DC phantom power (9-52 volts) must be applied equally to Pins 2 and 3, with the ground for the power supply connected to Pin 1. This can be provided by a console or mixer with built-in phantom voltage or with the addition of an in-line phantom power supply, such as the recommended Audio-Technica CP8506 and AT8801 power supplies.

If an extension cable is necessary, AT8314 cable (or equal) should be used. Regardless of cables used, it is important that both ends of each cable are wired consistently, with the shield always connected to Pin 1 at both ends, Pin 2 connected to Pin 2, and Pin 3 to Pin 3. This will ensure that all microphones are electrically in phase and reduce problems of uneven response and sound cancellation when two microphones are used close to each other.

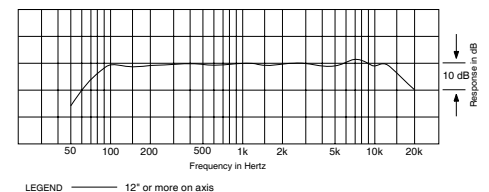
The high sensitivity of the PRO47T ensures useful output and an excellent match to most mixer, tape recorder and amplifier inputs. It will provide undistorted output even in sound fields as loud as 134 dB SPL. However, due to the high sensitivity, in some instances it may be possible to overload sensitive input stages. If distortion occurs, *first* check for *input* overload. In such cases, an attenuator such as the Audio-Technica AT8202 may be required between the mic and the electronics input. (Also, many mixers provide "input pad" switches to reduce mic-input signal levels.)

The provided AT8146 windscreens simply slips over the head of the microphone, effectively reducing wind noise or "popping" when used extra close.

The small-diameter gooseneck is very easy to manipulate for proper positioning. It is heavily lubricated to offer very smooth and quiet operation. Should it become noisy with prolonged use, apply a light machine oil directly on the gooseneck area affected.

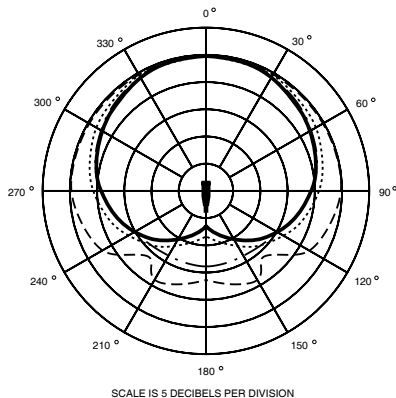
While a modern condenser microphone is not unduly sensitive to the environment, temperature extremes can be harmful. Exposure to high temperatures can result in gradual and permanent reduction of the output level. Avoid leaving the microphone in the open sun or in areas where temperatures exceed 110° F (43° C) for long periods of time. Extremely high humidity should also be avoided.

Frequency Response



PRO 47T and PRO 47TL

Polar Pattern



LEGEND
 200 Hz ———
 1 kHz - - - -
 5 kHz ······
 8 kHz - · - ·

PRO 47T and PRO 47TL SPECIFICATIONS†

Element	Fixed-charge back plate permanently polarized condenser
Polar Pattern	Cardioid (Unidirectional)
Frequency Response	70-16,000 Hz
Open Circuit Sensitivity	-37 dB (14.1 mV) re 1V at 1 Pa*
Impedance	100 ohms
Maximum Input Sound Level	134 dB SPL, 1 kHz at 1% T.H.D.
Signal-to-noise Ratio ¹	66 dB, 1 kHz at 1 Pa*
Dynamic Range (Typical)	106 dB, 1 kHz at Max SPL
Phantom Power Requirements	9-52V DC, 2 mA typical
Weight (less cable)	
PRO 47T	2.2 oz (63 grams)
PRO 47TL	2.4 oz (67 grams)
Dimensions	
PRO 47T	12.40" (315.0 mm) long
PRO 47TL	15.79" (401.0 mm) long
Both	0.47" (12.0 mm) head diameter
Output Connector	3-pin XLRM-type
Cable	9.8' (3.0 m) long (permanently attached to microphone), 0.10" (2.6 mm) diameter, 2-conductor, shielded cable
Accessories Furnished	AT8146 foam windscreen, AT8425 5/8"-27 threaded mounting stud

† 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

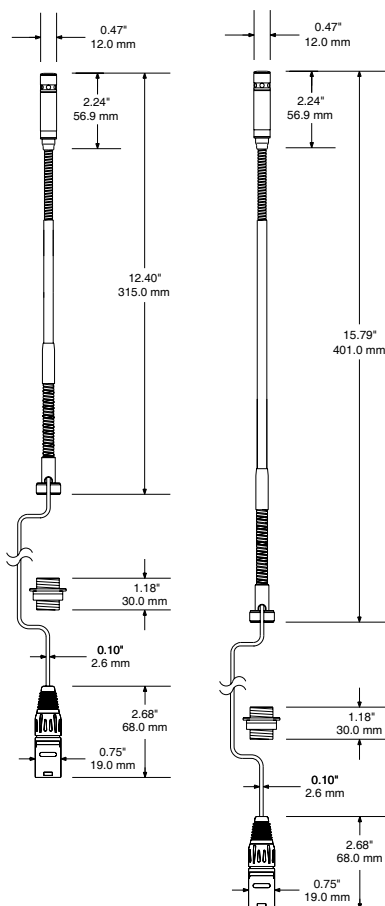
¹ Typical, A-weighted, using Audio Precision System One

Optional Accessories:

- AT8104a large metal windscreen.
- AT8117 large foam windscreen for high-wind conditions.
- CP8201 line matching transformer (Lo-Z to 50,000 ohms).
- AT8202 adjustable in-line attenuator for use with balanced Lo-Z microphones.
- AT8314 2-conductor, shielded, vinyl-jacketed, broadcast-type cable with XLR-F-type connector at microphone end, XLRM-type connector at equipment end. Available in 10', 20', 25', 30', 50' & 100' lengths.
- AT8416 shock mount.
- CP8506 four-channel 48V phantom power supply (AC powered).
- AT8601 microphone desk stand.
- AT8614 die-cast microphone desk stand.
- AT8801 single-channel 48V phantom power supply (AC powered).

PRO 47T Dimensions

PRO 47TL Dimensions



INFORMATION & IMAGE MANAGEMENT SYSTEMS, S.A.

Valencia, 279, 7ª planta
 08009 Barcelona (España)
<http://www.ims.es>



Tel. (34) 93 272 33 00
 Fax (34) 93 487 39 00
 e-mail: info@ims.es