

Description

The AT857QMa is a wide-range condenser microphone designed for quality sound reinforcement, professional recording, television, and other demanding sound pickup applications. A 3-pin male connector insert at the base allows the AT857QMa to be plugged directly into a 3-pin panel jack connector or a standard microphone cable. With an overall height of 14.51", its small-diameter alternating gooseneck design permits highly flexible positioning while maintaining a smooth, well-contoured appearance. The AT857QMLa is a 19.00" version of this microphone.

Supplied as a cardioid, the AT857QMa easily accepts interchangeable elements to permit selection of angle of acceptance from 100° to 360°. The following optional elements are available from an authorized Audio-Technica dealer or the A-T service department: AT853H-ELE hypercardioid, AT853O-ELE omnidirectional, AT853SC-ELE subcardioid.

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

A flat-response/low-roll-off switch is built into the integral power module of the microphone. The low-roll-off feature attenuates low-frequency response to compensate for proximity effect if the unit is used very close. Low roll-off can also be used to minimize background ambiance, air conditioning rumble, mechanical noise, etc., improving the quality of sound pickup under difficult conditions.

The microphone element is enclosed in a rugged housing with a low-reflectance black finish.

Installation and Operation

The AT857QMa is a completely self-contained unit ready to plug into a mating XLR-type panel jack or cable connector. An external 9V to 52V DC source is required to power the unit.

Output is low impedance balanced. The XLRM-type connector mates with XLR-type cable 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.

The provided AT8102 two-stage foam wind-screen simply slips over the head of the microphone, effectively reducing wind noise or "popping" when used extra close.

The small-diameter gooseneck is easy to manipulate for proper positioning. Heavily lubricated, it operates smoothly and quietly. Should the unit 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.

Architects and Engineers Specifications

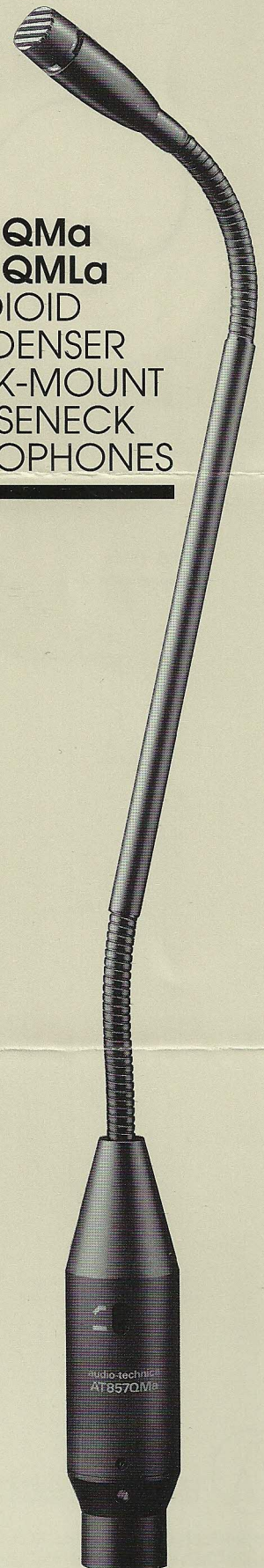
The microphone shall be a fixed-charge condenser with a cardioid polar pattern and a frequency response of 30 Hz to 20,000 Hz. It shall be capable of accepting optional interchangeable elements for additional polar patterns. It shall operate from an external 9V to 52V DC phantom power source. Nominal open-circuit output voltage shall be 7.0 mV at 1 kHz, 1 Pascal. Output shall be low impedance balanced (200 ohms).

The microphone shall have a self-contained power module with an XLRM-type connector insert at the base for direct connection to a mating XLR-type panel jack or cable connector. The power module shall contain a switch for low-frequency roll-off.

The microphone shall be a small-diameter alternating gooseneck design with a length of 14.51" (368.6 mm) [19.00" (482.6 mm)]. Head diameter shall be 0.47" (12.0 mm). The microphone weight shall be 4.2 oz (120 grams) [4.4 oz (126 grams)]. Finish shall be low-reflectance black.

The Audio-Technica AT857QMa [AT857QMLa] is specified.

AT857QMa AT857QMLa CARDIOID CONDENSER QUICK-MOUNT GOOSENECK MICROPHONES



Frequency Response

