



### Features

- **Quick-mount design with 3-pin XLRM-type connector insert at base plugs into any standard XLRF-type surface or cable connector**
- **Uniform cardioid polar pattern with 120° acceptance angle**
- **Superior off-axis rejection for maximum gain before feedback**
- **Easy-to-adjust, rugged, small-diameter, alternating gooseneck with virtually no “memory” permits quick positioning into desired shape**
- **UniSteep® filter provides a steep low-frequency attenuation to improve sound pickup without affecting voice quality**
- **Two-stage foam windscreen yields dramatically improved resistance to P-pops and other breath blasts**

### Description

The U859QL is a wide-range condenser microphone with a cardioid polar pattern. It is designed for quality sound reinforcement, professional recording, television and other demanding sound pickup applications.

The small-diameter double gooseneck design permits highly flexible positioning while maintaining a smooth, well-contoured appearance. The U859QL stands 480.0 mm (18.90") from the table or podium.

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

The microphone's cardioid polar pattern provides a 120° angle of acceptance.

An XLRM-type connector insert at the base allows the microphone to be plugged directly into an XLRF-type panel jack or microphone cable.

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

The microphone comes equipped with a two-stage foam windscreen. The microphone is enclosed in a rugged housing with a low-reflectance black finish.

### Installation and Operation

The U859QL 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.

The provided two-stage foam windscreen simply slips over the head of the microphone, effectively reducing wind noise or popping.

An integral 80 Hz high-pass UniSteep® 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. To engage the UniSteep® filter, use the end tip of a paperclip or other small pointed instrument to slide the switch toward the “bent” line.

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 designed for permanent installation or portable applications. It shall have a cardioid polar pattern with a uniform 120° angle of acceptance and a frequency response of 100 Hz to 16,000 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 140 dB with a dynamic range of 111 dB. Nominal open-circuit output voltage shall be 7.0 mV at 1 V, 1 Pascal. Output shall be low impedance balanced (250 ohms).

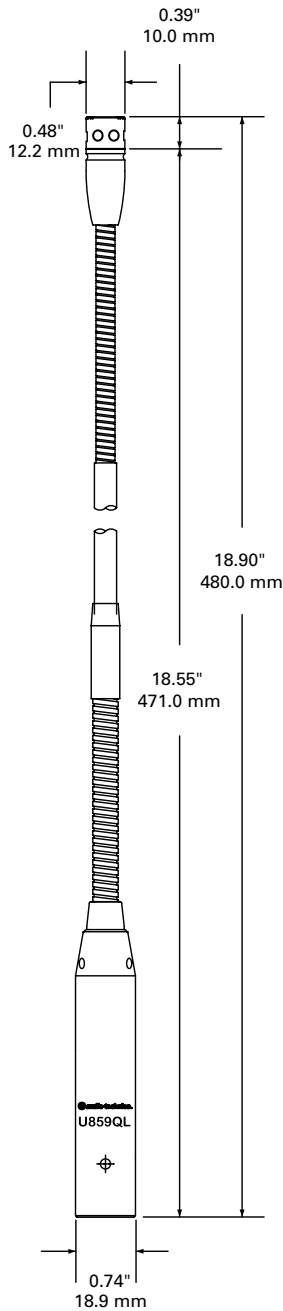
The microphone shall incorporate a self-contained power module with an XLRM-type connector at the base for direct connection to a mating XLRF-type panel jack or cable connector. It shall include a recessed switch to permit choice of flat response or 80 Hz low-frequency roll-off.

A two-stage foam windscreen shall be included.

The microphone shall be a small-diameter alternating gooseneck design, with an overall length of 480.0 mm (18.90") and a head diameter of 12.3 mm (0.48"). Weight shall be 152 grams (5.4 oz). Finish shall be low-reflectance black.

The Audio-Technica U859QL is specified.

# U859QL



## Specifications

<b>Element</b>	Fixed-charge back plate, permanently polarized condenser
<b>Polar pattern</b>	Cardioid
<b>Frequency response</b>	100-16,000 Hz
<b>Low frequency roll-off</b>	80 Hz, 18 dB/octave
<b>Open circuit sensitivity</b>	-43 dB (7.0 mV) re 1V at 1 Pa
<b>Impedance</b>	250 ohms
<b>Maximum input sound level</b>	140 dB SPL, 1 kHz at 1% T.H.D.
<b>Dynamic range (typical)</b>	111 dB, 1 kHz at Max SPL
<b>Signal-to-noise ratio<sup>1</sup></b>	65 dB, 1 kHz at 1 Pa
<b>Phantom power requirements</b>	11-52V DC, 2 mA typical
<b>Switch</b>	Flat, roll-off
<b>Weight</b>	152 g (5.4 oz)
<b>Dimensions</b>	480.0 mm (18.90") long, 12.3 mm (0.48") head diameter, 18.9 mm (0.74") base diameter
<b>Output connector</b>	Integral 3-pin XLRM-type
<b>Audio-Technica case style</b>	M34
<b>Accessory furnished</b>	AT8153 two-stage foam windscreen

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

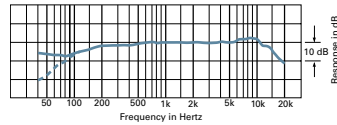
1 Pascal = 10 dynes/cm<sup>2</sup> = 10 microbars = 94 dB SPL

<sup>1</sup> Typical, A-weighted, using Audio Precision System One.

Specifications are subject to change without notice.

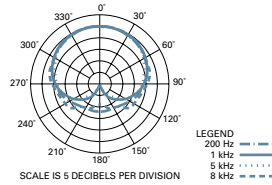


frequency response: 100–16,000 Hz



LEGEND — 12° or more on axis  
- - - Roll-off

polar pattern



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