

# LM-300A LM-300AL

## SUPERCARDIOID CONDENSER DUAL GOOSENECK LECTERN MICROPHONES

The Crown LM-300A and LM-300AL are dual-gooseneck microphones for lecterns, pulpits, or similar applications. The mics are identical except for arm length (see Figs. 3 and 4). Each professional-quality mic is an electret-condenser type with a supercardioid pickup pattern. The mics plug directly into a female 3-pin XLR-type panel connector.

Because of their supercardioid pickup pattern, the LM-300A and LM-300AL reject more background noise, room reverberation, and feedback than a typical cardioid microphone.

The models have a smooth, wide-range frequency response for natural reproduction of the singing or speaking voice. Very low frequencies are filtered out to reduce pickup of mechanically induced noise, room rumble, etc. The goosenecks adjust silently.

Supplied with the microphones is the WS-9, a highly effective foam pop filter. Its two-stage design greatly reduces explosive breath sounds. A low-cut switch built into the electronics housing further reduces breath pops and handling noise. Optional accessories include the LM-SM lockable shock mount, which provides mechanical isolation when mounted in a pulpit, lectern, or table top.

The microphone connector is a male 3-pin XLR-type for easy plug-in installation. The output is balanced and low impedance which allows long cable runs without hum pickup or high frequency loss. Superior RFI protection is also provided. Requires 12-48 V phantom power.

### Operating Instructions

1. Plug the microphone into a 3-pin XLR-type female panel connector in the lectern. The LM-300A and LM-300AL will also fit into the LM-SM shock mount and then plug into a standard 3-pin XLR-type female cable connector. A 3/4-inch (1.905-cm) diameter mic clamp or butterfly clamp can also be used.

2. Near the mixer, plug the mic cable from the lectern into a phantom power supply input. Connect another mic cable between the phantom power supply output and a mixer mic input. Or, if the mixer has phantom power built in, simply plug the mic cable into a mixer mic input connector, and turn on the phantom power.

3. If mechanical noise or breath pops are excessive, use a pen or pencil to set the flat/low-



### Specifications

**Type:** Unidirectional condenser.

**Element:** Electret condenser.

**Frequency response (typical):** 80 Hz to 15,000 Hz (110 Hz to 15,000 Hz with low cut). See Fig. 1.

**Polar pattern:** Supercardioid. See Fig. 2.

**Impedance:** 150 ohms, balanced. Recommended minimum load impedance 1000 ohms.

**Open-circuit sensitivity:** 6 mV/Pa\* (-44.5 dBV/Pa\*).

**Power sensitivity:** -42 dBm/Pa\*.

**Equivalent noise level:** 28 dB SPL typical (0dB=.0002 dyne/cm<sup>2</sup>), A-weighted.

**S/N ratio:** 66 dB at 94 dB SPL.

**Maximum SPL:** 120 dB SPL produces 3% THD.

**Polarity:** Positive pressure on the diaphragm produces a positive voltage on pin 2 with respect to pin 3 of the output connector.

**Operating voltage:** 12 to 48 V phantom power, positive voltage on pins 2 and 3 with respect to pin 1 of the output connector.

**Current drain:** 3.5 mA.

**Materials:** Steel housing and gooseneck.

**Finish:** Black.

**Weight:** LM-300A: 5.0 ounces (145 grams).  
LM-300AL: 5.5 ounces (159 grams).

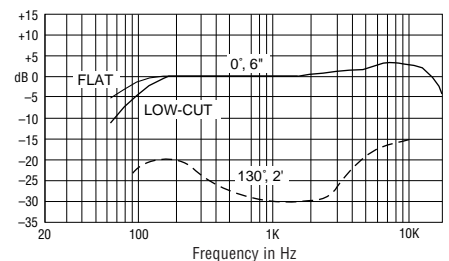
**Dimensions:** See Fig. 3 on reverse side.

**Included accessories:** WS-9 foam pop filter (Fig. 4).

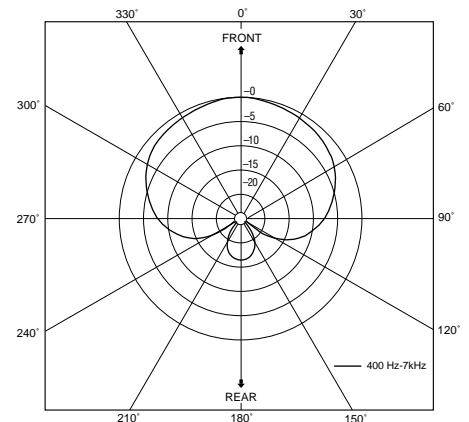
**Optional accessories:** WS-5 foam windscreen. LM-SM shock mount. PH-4B phantom power supply (4 channels, AC powered). PH-1A phantom power supply (1 channel, battery or AC adaptor powered). PS-24 24V DC power supply for PH-1A. ASA-4 mic stand adapter.

\*1 pascal = 10 dynes/cm<sup>2</sup> = 10 microbars = 94 dB SPL.

**Fig. 1 Frequency Response**



**Fig. 2 Polar Response**



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cut switch in the electronics housing to “cut” (⌊). Push the switch up to enable low cut.

4. To further reduce mechanical noise, order and install the accessory LM-SM shock mount.

5. Do not lubricate the gooseneck.

### Architects' and Engineers' Specifications

The microphone shall be the Crown model LM-300A or LM-300AL or equivalent. The microphone shall be a supercardioid electret-condenser type with adjustable silent dual goosenecks. Electronics and connector for the microphone shall be in a rugged steel cylindrical housing at the end of the gooseneck. A flat/low-cut switch shall be built into the electronics housing.

The microphone shall be powered from 12 to 48 volts phantom power. Frequency response shall be uniform from 80 Hz to 15,000 Hz. Open-circuit sensitivity shall be 6 mV/Pa. Impedance shall be 150 ohms balanced.

Maximum SPL capability shall be 120 dB SPL at 3% THD. Equivalent noise shall be 28 dBA typical (0 dB = 0.0002 dyne/cm<sup>2</sup>).

The Crown models LM-300A and LM-300AL microphone are specified.

### Warranty

Crown professional microphones are guaranteed against malfunction for a period of three years from date of original purchase. See the

enclosed warranty sheet for additional information.

### Service

If the microphone does not function properly, replace or repair mic cables and connectors, check the power supply.

If you determine the microphone product(s) is defective, return the complete product in its original packaging to: **Crown Factory Service, 1718 W. Mishawaka Road, Elkhart, IN 46517.** For further assistance or technical support call **800-342-6939.**

Fig. 3

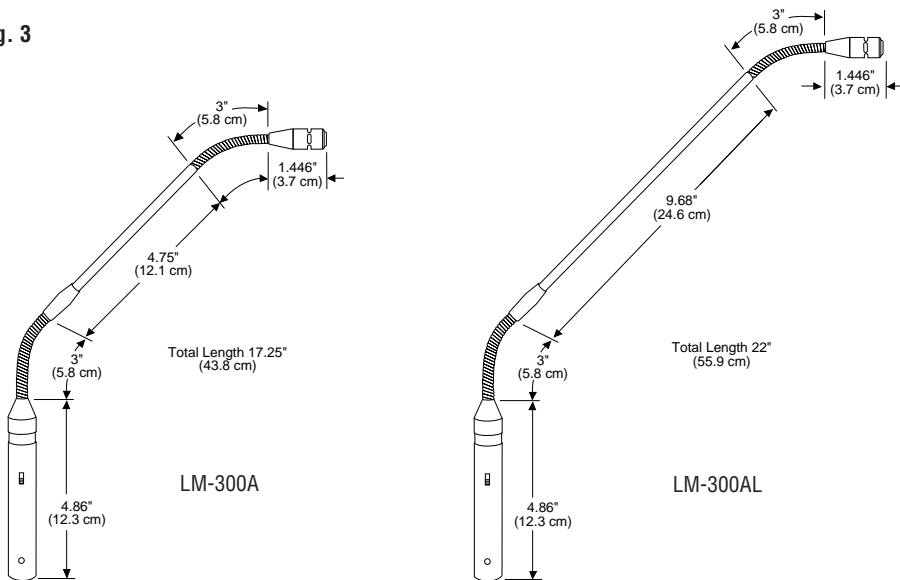
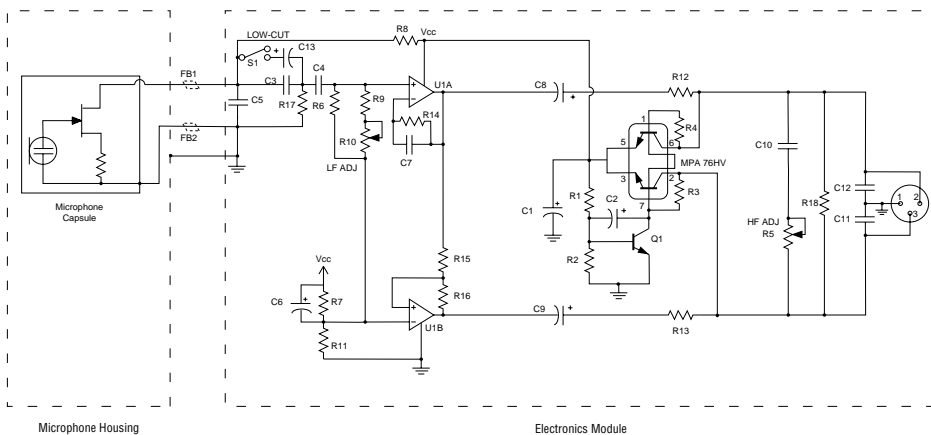
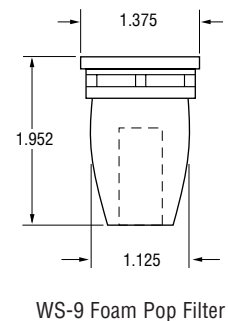


Fig. 4



LM-300A and LM-300AL Schematic



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