

# LM-301A

power. Make sure the phantom power switch on the mic is on.

5. If phantom power is not available on your audio mixer, connect the mic cable from the LM-301A to an external phantom power supply such as a Crown PH-1A or PH-4B. Connect another mic cable between the phantom power supply output and a mixer mic input.

6. If mechanical noise or breath pops are excessive, use a pen or pencil to set the flat/low-cut switch in the electronics interface to "cut" (—). Push the switch up to enable low cut.

7. Do not lubricate the gooseneck.

### Architects' and Engineers' Specifications

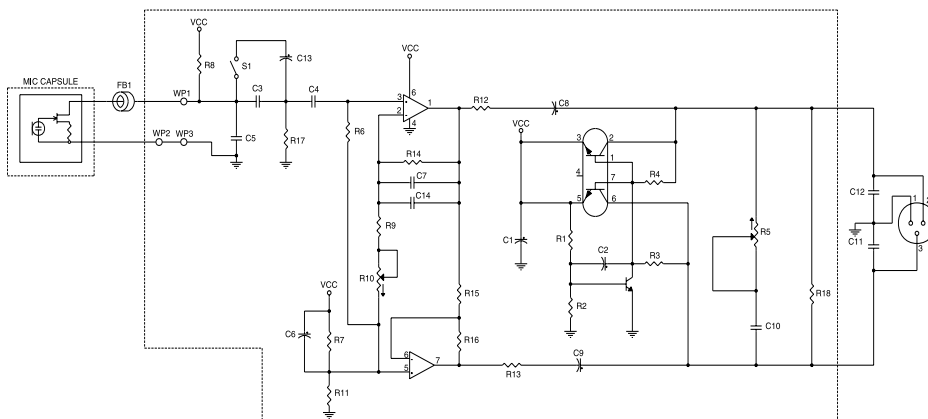
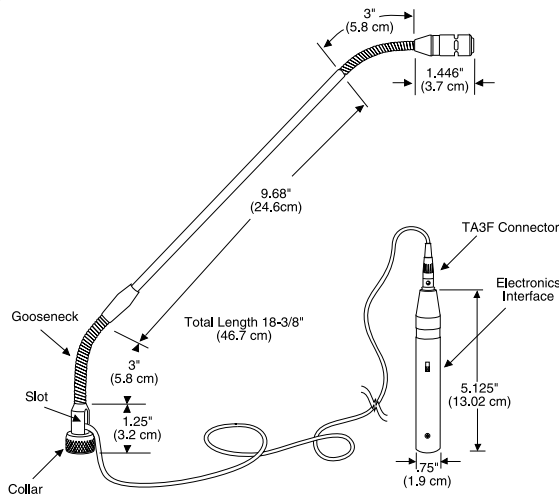
The microphone shall be the Crown model LM-301A or equivalent. The microphone shall be a supercardioid electret-condenser type with dual silent goosenecks. Electronics and connector for the microphone shall be in a

separate rugged steel cylindrical housing. A flat/low-cut switch shall be built into the electronics housing. A TA3F connector at the end of the mic cable shall connect to the electronics. The microphone shall have a built-in 5/8-inch (15.88-mm)-27 threaded collar that screws onto a mic stand, mic boom or Atlas AD-12 male flange. The cable can be routed either outside or inside the mounting device.

The microphone shall be powered from 12 to 48 volts phantom powering. 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 = .0002 dyne/cm<sup>2</sup>). The Crown Model LM-301A microphone is specified.

Fig. 3



LM-301A Schematic

### Warranty

Crown professional microphones are guaranteed unconditionally against malfunction from any cause for a period of three years from date of original purchase. See enclosed warranty sheet for additional information.

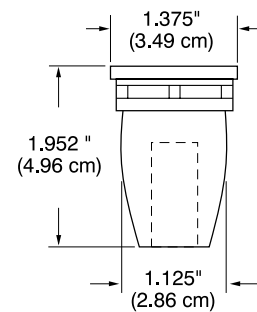
### Service

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 (mic and interface) in its original packaging to **Crown Service Department, Plant 2 SW, 1718 West Mishawaka Road, Elkhart, IN 46517**. For further assistance or technical support call **800-342-6939**.

**The mic and electronics are a matched pair. Do not separate them. For service send them both in.**

Fig. 4 WS-9 Foam Pop Filter



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# LM-301A

The Crown<sup>®</sup> LM-301A is a supercardioid, electret condenser, miniature dual gooseneck microphone. It is designed for professional use on lecterns and for inconspicuous miking of musical instruments. The LM-301A comes in two parts: microphone/cable and a cylindrical electronics housing.

The microphone has a built-in  $\frac{5}{8}$ -inch (15.88-mm)-27 threaded collar that can be screwed onto a mic stand, mic boom or an Atlas AD-12 male flange. Because of the unique design of the mounting collar, the mic cable can be routed either outside or inside the mounting collar.

Because of its supercardioid pickup pattern, the LM-301A rejects more background noise, room reverberation, and feedback than a typical cardioid microphone.

The LM-301A has 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 gooseneck adjusts silently.

Supplied with the microphone 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-301SMA shock mount adapter.

The microphone output is a male 3-pin XLR-type connector and is balanced, low impedance, which allows long cable runs without hum pickup or high-frequency loss. Superior RFI protection is also provided.

## Operating Instructions

Please refer to Fig. 3 to identify the parts mentioned.

1. To route the mic cable inside the mounting device: remove the TA3F connector, push the collar up onto the gooseneck and pull the cable down through the collar. Reattach TA3F.

2. To route the mic cable outside the mounting device: remove the TA3F connector, push the collar up onto the gooseneck, route the end of the cable inside the collar and slot and pull the cable up through the collar and slot. Reattach TA3F.

3. Plug the electronics interface into a 3-pin XLR-type cable routed to the audio mixer.

4. At the mixer, plug the mic cable from the lectern into an input with 12-48 volt phantom

## SUPERCARDIOID CONDENSER DUAL GOOSENECK LECTERN MICROPHONE



## 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 dB re 1 V/Pa\*).

**Power sensitivity:** -42 dB re 1 mW/Pa\*.

**Equivalent noise level:** 28 dB SPL typical (0 dB = .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:** Phantom power, 12 to 48 volts DC, positive voltage on pins 2 and 3 with respect to pin 1 of the output connector.

**Current drain:** 3.5 mA.

**Cable:** 10' (3.05-m) 2-conductor shielded 0.1" diameter cable integral to microphone terminated with Switchcraft TA3F.

**Connectors:** Switchcraft TA3F on mic cable, TB3M and 3-pin male XLR type in electronics interface.

**Materials:** Steel housing and gooseneck.

**Finish:** Black.

**Weight:** 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-301SMA shock mount adapter and windscreen, 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.

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

Fig. 1

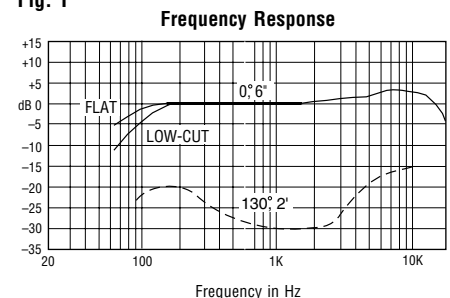


Fig. 2

