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**MODEL 500G**

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**GOOSENECK MICROPHONE**

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The 500G Gooseneck Microphone is specifically designed for use with the 500 Series and 508 Series microphone station models in which gooseneck microphones are used.

The electret condenser cartridge is positioned in the housing such that its frequency response is enhanced. The microphone element location provides the mechanism for good acoustical coupling to provide a full-bodied, highly intelligible voice signal. The built-in preamplifier and line driver circuitry provide a line level audio signal which can drive long cable lengths without high frequency rolloff and minimize the susceptibility to interference.

The electret condenser microphone cartridge consists of a high voltage internal membrane, metal electrode and a Field Effect Transistor (FET). The requirement for a high voltage bias is not necessary as with ordinary condenser microphone elements. The cartridge features include a highly efficient electrical specification, pressure type operating principle, low impedance (2.2 k $\tau$ ), and high reliability under adverse shock, vibration and other environmental conditions.

The gooseneck microphone contains an omnidirectional electret condenser microphone cartridge integrated with a microphone preamplifier and an audio line driver. The microphone element is mounted in the metal windscreen portion of the gooseneck. The preamplifier and line driver are on a PC board mounted inside the base of the gooseneck on an XLR connector. The microphone assembly is a 17" gooseneck with a hard metal windscreen at the top and a 5 pin XLR connector in the base for mounting.

The 500G interfaces with the 500 Series and 508 Series microphone stations with a 5 pin male XLR connector. The mating connector for the gooseneck versions of the microphone stations are furnished with the corresponding 5 pin female XLR connector to interface with the 500G.

The 500G interfaces with the same 500 Series and 508 Series microphone station electronics as the 500HH Handheld Microphone and the 500HS Handset Microphone. With the preamplifier and line driver built in it is less susceptible to noise and interference than typical gooseneck microphones.



## SPECIFICATIONS

### ACOUSTIC

- |                                  |                              |
|----------------------------------|------------------------------|
| 1. Transducer Type . . . . .     | Electret Condenser Cartridge |
| 2. Operating Principle . . . . . | Pressure Receiver            |
| 3. Pattern . . . . .             | Omnidirectional              |

### ELECTRICAL, ANALOG

- |   |                    |
|---|--------------------|
| 1. Frequency Response . . . . .                 | See Figure 1       |
| 20 Hz - 20 kHz                                  |                    |
| 2. Input Sensitivity . . . . .                  | -64 dB, 3 dB       |
| 0 dB = 1 V/mbar, 1 kHz                          |                    |
| 3. Noise Referred to the Input (NRI) . . . . .  | <-90 dB            |
| 20 Hz - 20 kHz, referred to +4 dBu output       |                    |
| 4. Output Impedance, Z <sub>OUT</sub> . . . . . | <1 $\tau$          |
| 5. Maximum Output . . . . .                     | +4 dBu             |
| 6. Normal Output . . . . .                      | -20 dBu            |
| 7. Power Supply                                 |                    |
| Supply Voltage Range . . . . .                  | 14.25 V to 15.75 V |
| Supply Current . . . . .                        | 3 mA               |
| V = +15 VDC                                     |                    |

### CONNECTORS

- |                            |                |
|----------------------------|----------------|
| 1. Connector (1) . . . . . | 5 pin male XLR |
|----------------------------|----------------|

### MECHANICAL

- |                            |              |
|----------------------------|--------------|
| 1. Size, Overall . . . . . | See figure 3 |
|----------------------------|--------------|

### ENVIRONMENTAL

- |  |                                    |
|--|------------------------------------|
| 1. Operating Temperature Range . . . . . | (+32 °F - +104 °F) 0 °C - +40 °C   |
| 2. Storage Temperature Range . . . . .   | (-40 °F - +158 °F) -40 °C - +70 °C |

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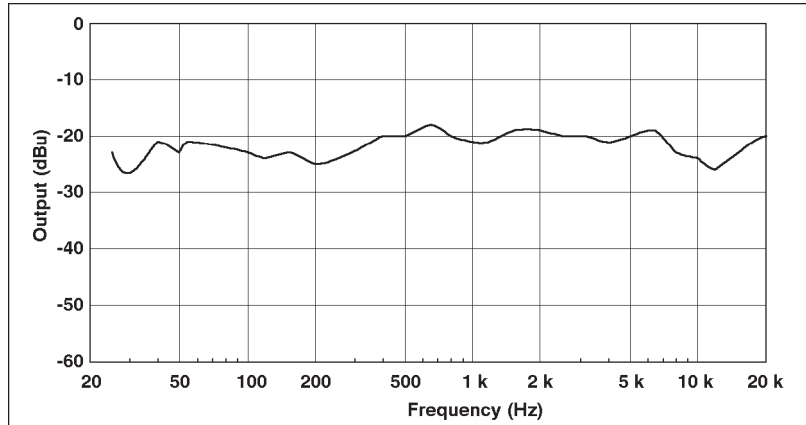


Figure 1 - 500G Frequency Response

PIN	FUNCTION
1	Audio Out -
2	Audio Out +
3	No Connection
4	+15 V
5	Ground

Figure 2 - 500G Gooseneck Microphone XLR Pin Connections



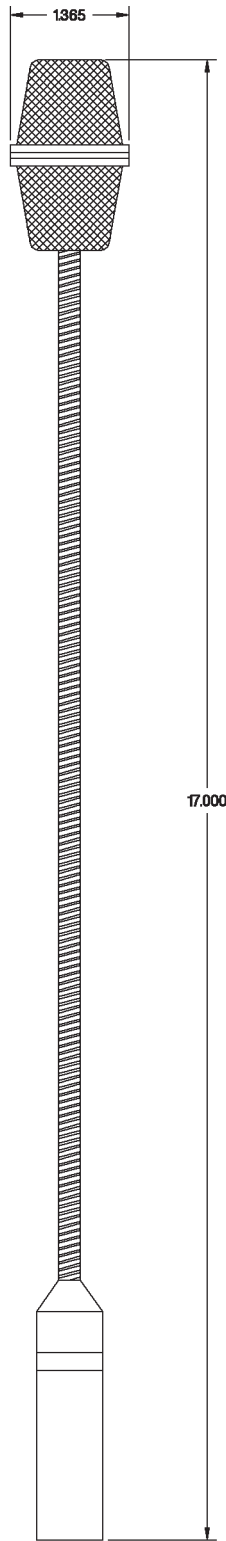


Figure 3 - Model 500G Gooseneck Microphone

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