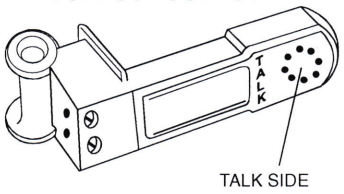
David Clark

WWW.DAVIDCLARK.COM

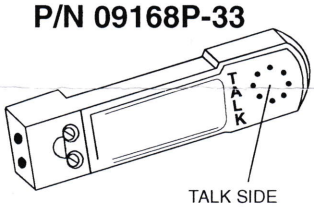
ELECTRET MICROPHONE
FOR USE IN AIRCRAFT

MODEL M-7/DC
P/N 09168P-31



TALK SIDE

MODEL M-7A
P/N 09168P-33



TALK SIDE

The David Clark Company Electret Microphone is a noise cancelling type designed to operate in place of carbon and amplified dynamic microphones. This microphone will not operate in circuits that do not supply a DC bias voltage. Most modern aviation communications equipment do supply this required voltage. If you are not certain, consult your radio technical manual or with your avionics shop.

NOTE

We strongly recommend that the master gain control located within the radio be optimized by a competent avionics technician whenever adding a new model microphone. The David Clark Company Incorporated Model M-7/DC and M-7A Microphones are designed to conform to guidelines set forth by The Radio Technical Commission for Aeronautics. Document No. RTCA/DO-170.

SPECIFICATIONS

1. DC supply voltage and source resistance: 8 to 16 volts, 220 to 2200 ohms – not polarity sensitive.

2. Output voltage, 1000 Hz for 114 dB SPL (re: .0002 microbar) input, as a function of DC source resistance and AC input impedance.

TYPICAL OUTPUT VOLTAGES

AC Input Impedance \ DC Bias Resistor	1000 ohms	470 ohms	150 ohms
1000 ohms	.74 V	.59 V	.28 V
500 ohms	.60 V	.50 V	.27 V
150 ohms	.31 V	.28 V	.19 V

Notes: 1. 8.0 V DC supply
2. Signal: 114 dB SPL re: .0002 microbar

3. *Frequency Response:* designed for optimum speech intelligibility and noise cancellation.

4. *Ambient noise level:* Communications can be carried on in noise levels up to 120 dB SPL (re: .0002 microbar) with adequate signal to noise ratio. **Microphone must be zero to 1/8" from lips at corner of mouth for best signal to noise ratio (maximum noise cancellation).**

5. Dimensions: 3/4 x 41/64 x 1-27/32 (19 x 16 x 47mm).

6. Weight: 0.2 oz. (5.6 grams).