

FIGURE 1 – Dimensions



EV-900 BOOM-MIKE HEADSET

DESCRIPTION AND APPLICATIONS

The Electro-Voice EV-900 full cushion headset is designed and engineered for highly articulate speech transmissions under high ambient noise conditions. The dual dynamic receivers and the noise cancelling dynamic microphone are FAA approved under TSO-C57 and C58. The dual soft foam cushions provide fatigue-free comfort for long periods of time and the ultimate in effective ambient noise reduction. The EV-900 uniquely meets the requirements of pilots whose attention must be centered on the actual operation of the aircraft and it's navigation instruments. With this headset the pilot need not search for a handheld microphone in the cockpit to communicate with air traffic controllers and/or other aircraft. The noise cancelling boom microphone which is mounted on a three axis adjustable boom is out of the pilot's line of sight but constantly positioned in a convenient speaking position. Simply by keying a press-to-talk switch on the control wheel the pilot is in instant communication.

SPECIFICATIONS

Type: (Mike)	Dynamic noise cancelling
Frequency Response: (Mike)	200 to 4000 Hz
Impedance: (Mike)	5 to 9 ohm
Impedance: (Rec)	8 to 10 ohm
Polar Pattern:	Bidirectional noise cancellation
Output Level:	105 dB SPL w/1 mW input at 1 kHz
Case Material:	A.B.S.
Finish:	Nonreflecting Light Gray
Net Weight:	553 grams (19.5 oz.)
Cable:	Four conductor unshielded 24" long
Cable Terminations	
Headset End:	None
Free End:	U-93A/U

Temperature Range: -40°C (-40°F) to +70°C (+158°F)
FAA Approval: TSO-C57 and C58

INSTALLATION

The EV-900 headset is designed for straight dynamic inputs and will not work into general aviation carbon microphone inputs. The U-93A/U mates with a U-92A/U female jack.

FIELD REPAIR INSTRUCTIONS

1. **Special Tools:** None
2. **Inspection:**
Check to see that all wires are connected to the U-93A/U connector. Also check the tightness of the set screws at the rear of the microphone.
3. **Function Test:**
Using an ohmmeter, check resistance between sleeve and second ring from sleeve. You should get 8 to 10 ohms. A reading of 16 to 20 ohms indicates one element bad. Listen for a click in earphones during test. Also check resistance between tip and second ring from tip. You should get 5 to 9 ohms and a click in the microphone element.
4. **Repair or Replacement:**
 - A. To replace microphone element loosen two set screws and remove plug from rear. Removing the two exposed screws releases the M-101 head from it's adapter.
 - B. To replace earphone element, remove ear cushion and pry apart the ear cup with a blade along the seam that was covered by the ear cushion. Release the wires from the element by loosening the set screws.

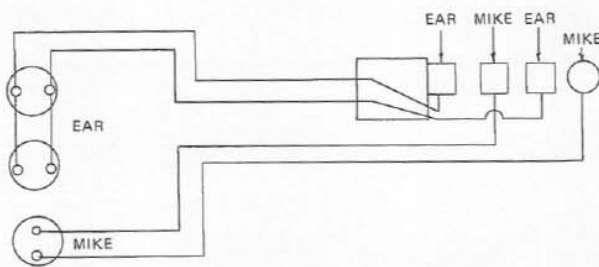


FIGURE 2 — Wiring Diagram

PHYSICAL ADJUSTMENT AND POSITIONING

The boom mounted microphone is 360° rotational which lends the microphone positioning to the outboard side for both the pilot and co-pilot seating configuration. The dynamic noise cancelling microphone should be placed at the corner of the mouth with the lips just touching the microphone housing (front) for best voice transmissions.

This critical placement can easily be accomplished to fit any facial configuration due to our incorporating three pivot points for maximum adjustment capability.

The headphones are easily adjusted so that the ear rests comfortably while being centered in the ear cavity opening. The headband adjustment which permits the earcup cavity to be centered is accomplished by lifting up on the metal spring tab located on each side of the headband and then with the tab in the raised position pull down or up on the earcup cavity until it is centered on your ear. This will allow maximum noise attenuation and also the greatest degree of comfort to be realized.

PARTS LIST EV-900

Item No.	Part No.	Description
1	82577	M-101/AIC Mike element
2	992-8125	H-87B/U Earphone element
3	88251	Mike boom (two sections)
4	88250	Mike boom mount (complete)
5	79950	Headband cover
6	79706	Ear cushion (order two to insure match)
7	17295	U-93A/U Connector

WARRANTY

Electro-Voice aircraft microphones and accessories are guaranteed for twenty-four (24) months from date of original purchase against malfunction due to defects in workmanship and materials. If such malfunction occurs, microphone will be repaired or replaced (at our option) without charge for materials or labor if delivered prepaid to the proper Electro-Voice service facility. Unit will be returned prepaid. Warranty does not cover finish, appearance items, cables, cable connectors, or switches and does not cover malfunction due to abuse or operation at other than specified conditions. Repair by other than Electro-Voice or its authorized service agencies will void this guarantee.

For correct shipping address, instructions on return of Electro-Voice products for repair, and locations of authorized service agencies, please write: Service Department, Electro-Voice, Inc., 600 Cecil Street, Buchanan, Michigan 49107 (Phone 616/695-6831).

Electro-Voice also maintains complete facilities for non-warranty service of E-V products.

