



**Electro-Voice®**

a MARK IV company

## Model RE85 Miniature Lavalier Dynamic Microphone

### SPECIFICATIONS

#### Element:

Dynamic

#### Frequency Response:

90-10,000 Hz (see Figure 2)

#### Impedance:

Lo-Z (150 ohms)

#### Output Level:

-61 dB

(0 dB = 1 mW/10 dynes/cm<sup>2</sup>)

#### EIA Sensitivity:

-155 dB

#### Polar Pattern:

Omnidirectional

#### Diaphragm:

Electro-Voice Acoustalloy®

#### Magnetic Circuit:

Alnico V

#### Shock Mounting:

Floating head capsule

#### Case Material:

Steel

#### Finish:

Champagne

#### Dimensions:

66.8 mm (2.63 in.) long,

23.3 mm (0.92 in.) maximum diameter,

#### Net Weight:

229 g (8 oz), with cable

#### Cable:

9.1 m (30 ft), two-conductor shielded,  
with chrome gray plastic jacket

#### Accessories Furnished:

Neck cord assembly

Tie clasp assembly

Protective vinyl carrying pouch

### DESCRIPTION AND APPLICATIONS

The Electro-Voice Model RE85 miniature lavalier microphone provides the ultimate in quality and versatility for the professional user. By means of a new internally shock-mounted microphone capsule, the RE85 can offer protection from mechanical noise due to contact with clothes and cord conduction to a degree never before possible. This miniature microphone can be used held in the hand, hung on a neck cord, or suspended on a tie clip assembly, leaving the hands of an announcer or performer free. It is excellent for audience participation, man-in-the-street interviews, panel shows — wherever microphone concealment, individual mobility, or free movement of the hands is desired. No closely associated auxiliary equipment is required.

The RE85 employs a unique new nesting shock-mount principle, similar to that employed in the Electro-Voice Model RE50. The complete generating element and necessary auxiliary parts are contained in an internal capsule which is precision shock-mounted in highly compliant rubber inside an extremely rugged and durable turned-steel case. The normal problems of mechanical noise conduction associated with lavalier microphones (noises from contact with clothing, from cord-contact with clothing and hard objects) are virtually eliminated.

The RE85 features the exclusive Electro-Voice Acoustalloy® diaphragm. This non-metallic diaphragm withstands high humidity, temperature extremes, corrosive effects of salt air and severe mechanical shocks. It is practically indestructible with normal use.

The RE85 is supplied with three specially designed accessories intended to increase the usefulness and mounting convenience of the microphone — a lavalier neck cord assembly from which the microphone can hang, mounted in a normal lavalier fashion on the chest of the user; a lavalier tie clip assembly, which allows hanging the microphone in a position similar to that of a tie clip; and a belt clip which can be used to keep the cord in constant position with uniform tension on the microphone. The cord assembly is supplied attached to the microphone. Used in conjunction with the neck cord assembly or tie clip assembly, the belt clip also helps to prevent unwanted mechanical noise. After inserting the cable in the clip shown in Figure 1, simply attach it to the belt at one side. It may also be clipped over the edge of a pocket or lapel.

A protective vinyl carrying pouch is also provided to house the microphone and its accessories, shielding the microphone from metal filings, airborne magnetic particles and dust when not in use.

### ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be an omnidirectional dynamic type with non-metallic Acoustalloy® diaphragm. The microphone shall have a magnetic shield to prevent dust and magnetic particles from reaching the diaphragm. It shall have a floating head capsule, internally shock-mounted to a high degree. A response of 90-10,000 Hz shall be obtained. Line shall be balanced to ground and phased.

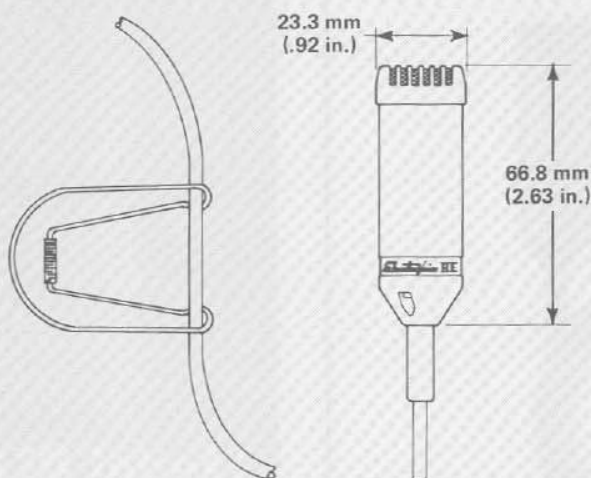


FIGURE 1 — Dimensions

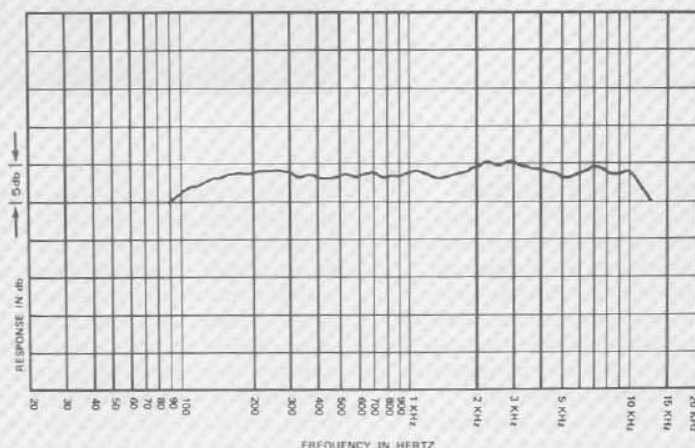


FIGURE 2 — Response 90° Off Axis  
Lavalier in Position

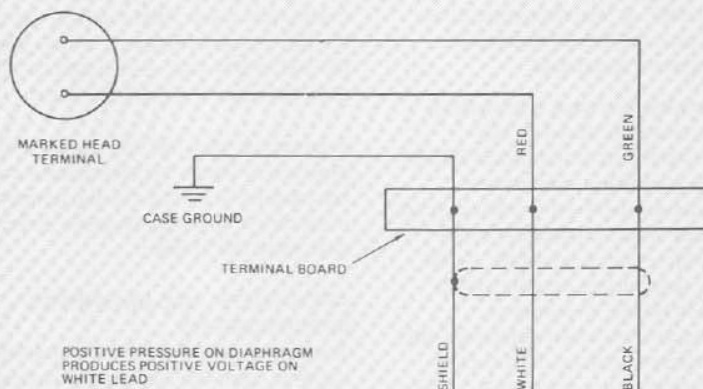


FIGURE 3 — Wiring Diagram

The output level shall be  $-61$  dB with 0 dB equaling  $1 \text{ mW}/10 \text{ dynes/cm}^2$ . EIA sensitivity rating shall be  $-155$  dB. The magnetic circuit shall be a non-welded circuit and employ Alnico V magnetic iron.

The outer case shall be made of rugged turned-steel. The microphone shall have a maximum diameter of 23.3 mm (0.92 in.), and a length of 66.8 mm (2.63 in.), and a net weight of 229 g (8 oz), including cable. The finish of the microphone shall be champagne color, non-abrasive. A 9.1 m (30 ft), two-conductor, shielded, chrome gray plastic-jacketed cable shall be provided. The microphone shall be supplied with a neck cord, tie clip assembly, and protective vinyl carrying pouch. Electro-Voice Model RE85 is specified.

#### WARRANTY (Limited)

Electro-Voice Professional, PL & BK Series Microphones are guaranteed against malfunction from any cause for a period of two years from date of original purchase. Also, these microphones are guaranteed without time limit against malfunction in the acoustic system due to defects in workmanship and material. Any active electronics incorporated in the microphone are guaranteed for three years from date of original purchase for parts and labor against such malfunction. 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 extend to finish, appearance items, cables, cable connectors, switches, or malfunction due to abuse or operation under other than specified conditions, nor does it extend to incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you. Repair by other than Electro-Voice or its authorized warranty service agencies will void this guarantee. A list of authorized warranty service centers is available from Electro-Voice, Inc., 600 Cecil Street, Buchanan, MI 49107 (AC/616-695-6831); or Electro-Voice West, 8234 Doe Avenue, Visalia, CA 93291 (AC/209-651-7777). This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Service and repair address for this product: Electro-Voice, Inc., 600 Cecil Street, Buchanan, Michigan 49107.

Specifications subject to change without notice.



**ELECTRO-VOICE, INC., 600 Cecil Street, Buchanan, Michigan 49107**

MANUFACTURING PLANTS AT ■ BUCHANAN, MI ■ NEWPORT, TN ■ SEVIERVILLE, TN ■ OKLAHOMA CITY, OK ■ GANANOCQUE, ONT.  
©Electro-Voice, Inc. 1990 ■ Litho In U.S.A. Part Number 53970-225

a MARK IV company