

**SPECIFICATIONS**

Type: Dynamic  
 Frequency Response: See Figure 2  
 Impedance: Matches all low impedance 50 through 250 ohms. Line balanced to ground and phased  
 Output Level  
     Low Impedance: -61 db  
     (0 db = 1 mw/10 dynes/cm<sup>2</sup>)  
 EIA Sensitivity Rating: -155 db  
 Polar Pattern: Omnidirectional  
     (See Figure 3)  
 Diaphragm: Acoustalloy®  
 Magnetic Circuit: Employs Alnico V and Armco magnetic iron in a nonwelded circuit  
 Case: High tensile, lathe-turned aluminum  
 Finish: Non-reflecting gray  
 Dimensions  
     Diameter: 3/4 inch  
     Length: 2-1/4 inch  
     (See Figure 1)  
 Net Weight: 31 grams, less cable and neck cord assembly  
 Cable: 30-foot, two conductor, shielded, brown synthetic rubber jacketed cable  
 Cable Connector: No connector at microphone terminal  
 Standard Accessories: Neck cord assembly, belt clip, stand adapter, and protective suede pouch

**WARRANTY**

The model 649B, like all Electro-Voice professional microphones, is guaranteed UNCONDITIONALLY against malfunction for two years from date of purchase. Within this period, Electro-Voice will repair or replace, at no charge, any 649B microphone exhibiting malfunction, regardless of cause, including accidental abuse. In addition, all Electro-Voice microphones are warranted without time limit against defects in workmanship and materials. Defective products will be repaired or replaced at no charge if returned to the factory prepaid.

**DESCRIPTION AND APPLICATIONS**

The Electro-Voice model 649B miniature lavalier microphone is the smallest, lightest-weight, wide-range, dynamic microphone manufactured today. Originally created for TV, this miniature microphone can be held in the hand, mounted on a stand, or hung on a neck cord leaving hands of the 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 model 649B features the exclusive Electro-Voice Acoustalloy® diaphragm. This nonmetallic diaphragm withstands high humidity, temperature extremes, corrosive effects of salt air, and severe mechanical shocks. It is practically indestructible with normal use.

The 649B is equipped with three specially designed accessories intended to increase the usefulness and mounting convenience of the microphone - a newly designed lavalier cord assembly, a belt clip, and a stand mounting adapter. The lavalier cord assembly is supplied attached to the microphone, ready for use. Note that the flexible plastic cord adapter may be removed from the microphone, if desired, by firmly pulling it over the front of the microphone. Alternately, it may be pushed free of the microphone and allowed to slide down the cable, the neck cord being retained separately for future use. In this case, the cord adapter will be retained permanently and cannot be lost since it cannot escape from either end of the cable. (In the event the cord is misplaced, an ordinary shoestring may be employed after simply tying a knot in each end.)

The belt clip, when used in conjunction with the



lavalier cord assembly, provides effective control of cable placement and prevents unwanted mechanical noise from being transmitted up the cable to the microphone. After inserting the cable in the clip as shown in Figure 1, simply attach it to the belt at one side. It may also be clipped over the edge of a pocket, etc.

The stand mounting adapter may be used to attach the 649B to any conventional microphone stand with 5/8"-27 thread. The built-in swivel permits adjustment of the microphone to any desired angle. Design of the adapter allows the microphone to be inserted or removed readily as desired.

A protective suede pouch is also provided to shield the microphone from filings, airborne magnetic particles, etc., when not in use.

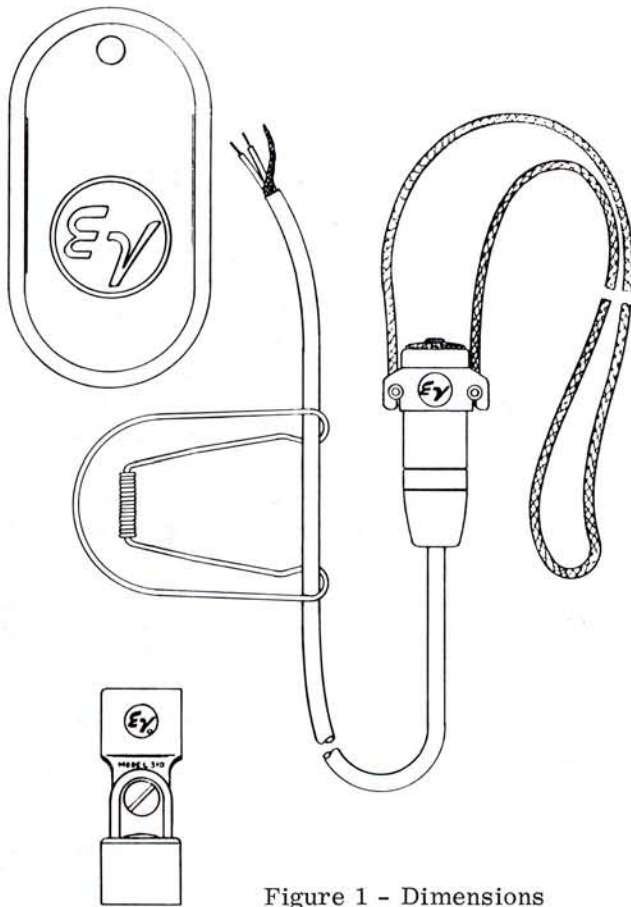


Figure 1 - Dimensions

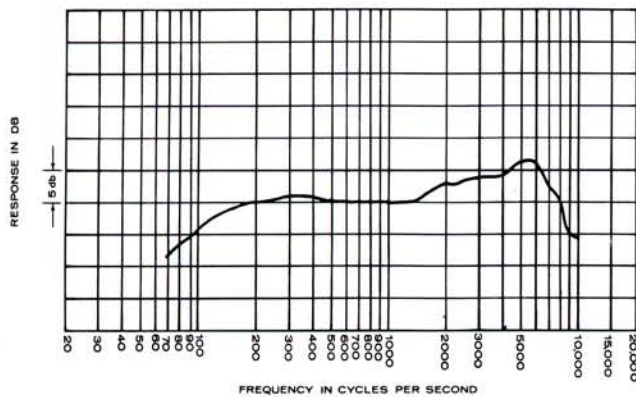


Figure 2 - Frequency Response

## ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be the Electro-Voice model 649B or equivalent. The microphone shall be an omnidirectional, dynamic type with nonmetallic Acoustalloy® diaphragm. The microphone shall have a magnetic shield to prevent dust and magnetic particles from reaching the diaphragm. A response from 70 to 10,000 cps shall be obtained. Line shall be balanced to ground and phased.

The output level shall be -61 db with 0 db equalling 1 mw/10 dynes/cm<sup>2</sup>. EIA sensitivity rating shall be -155 db. The magnetic circuit shall be a non-welded circuit and employ Alnico V and Armco magnetic iron.

The case shall be made of high-tensile, lathe-turned aluminum. The microphone shall have a diameter of 3/4 in., a length of 2-1/4 in., and a net weight of 31 grams without cable or neck cord assembly. Finish of the microphone shall be non-reflecting gray. A 30-foot, two conductor, shielded, brown, synthetic rubber-jacketed cable shall be provided. The microphone shall be supplied with a neck cord, belt clip, stand adapter, and protective suede pouch.

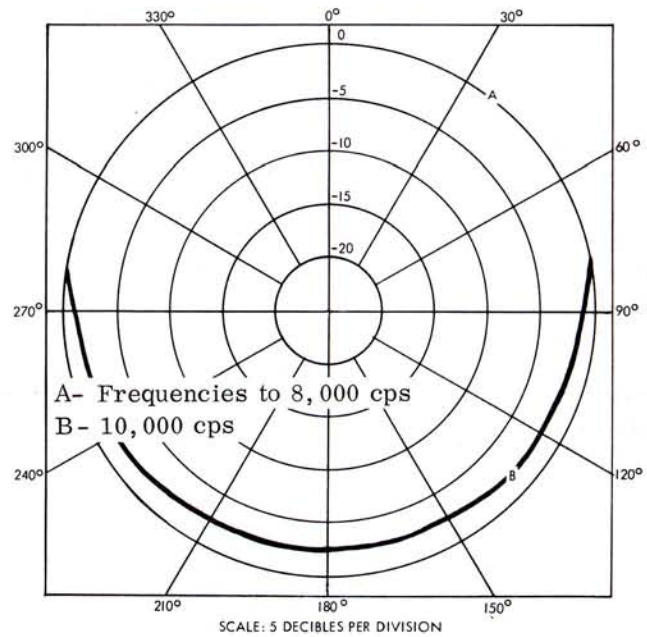


Figure 3 - Polar Pattern

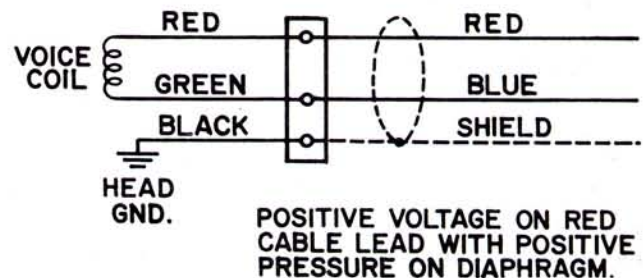


Figure 4 - Schematic