Electro-Voice®

ELECTRO-VOICE, INC.
BUCHANAN, MICHIGAN

Specifications

Model 649 Microphone

Fig. 1 — Model 649 Microphone

(Illustration actual size)

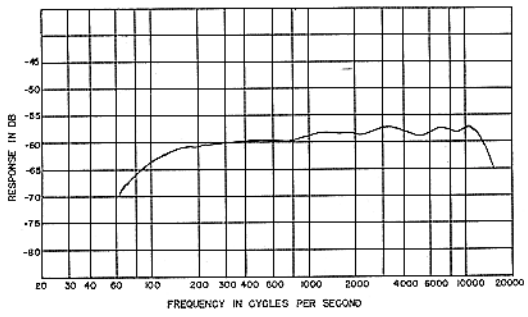


Fig. 2 — Response

The Electro-Voice Model 649 Miniature Lavalier Microphone is a dynamic omnidirectional type providing smooth response and high output. Originally created for TV, this small, slim microphone can be hung on a neck cord close to the chest leaving hands of the announcer or performer free for demonstrations . . . or it can be held in the hand or used on a desk stand. 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 microphone is equipped with a pop-proof wire-mesh grille which minimizes wind and breath blasts. Convenient impedance changes may be effected in the transformer housing with 50, 150, and 250 ohms available.

The Model 649 features the exclusive Electro-Voice Acoustalloy diaphragm. This nonmetallic diaphragm permits smooth response over a wide frequency range and withstands high humidity, temperature extremes, corrosive effects of salt air, and servere mechanical shocks. It is practically indestructible with normal use.

SPECIFICATIONS

Type: Dynamic

Frequency Response: Uniform from 70 to 13,000 cps.

Impedance: 50, 150 and 250 ohms (connected for 50 ohms when shipped)

Instructions for changing impedance — See fig. 5.
Press down on the locking pin (A) of the Cannon UA-312 connector male insert in the transformer housing. By pulling on the connector prongs the terminal board may be removed. The jumper wire (2) to the 50-ohm tap can be resoldered to the desired tap. The connector is then replaced and the locking pin will engage when the connector insert is properly seated.

Output Level:

50 ohm impedance: –62 db*; RETMA sensitivity rating, –155 db
150 ohm impedance: –62 db*; RETMA sensitivity rating, –156 db
250 ohm impedance: –62 db*; RETMA sensitivity rating, –154 db
*0 db equals 6mw/10 dynes/cm^2

Polar Pattern: Omnidirectional

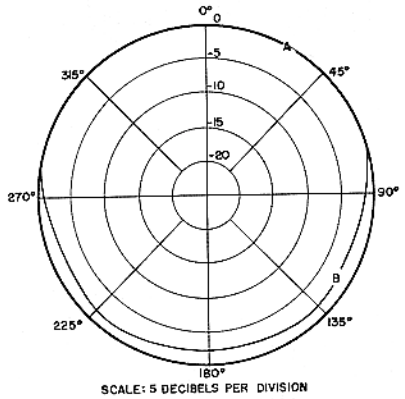
Diaphragm: Electro-Voice Acoustalloy

Magnetic Circuit: Employs Alnico V and Armco magnetic iron in a nonwelded circuit.

Case: High tensile, lathe-turned aluminum

Finish: Metaluster gray on microphone and transformer case

Electro-Voice Specifications / Model 649 Microphone



SCALE: 5 DECIBELS PER DIVISION
A—Frequencies to 8000 cps
B—10,000 cps

Fig. 3 — Polar Pattern

Dimensions: Diameter: ¾ in., Length: 2-11/16 in.

Net Weight: 2 oz less cable

Cable: 30-ft., three conductor, shielded, cotton jacketed cable from microphone to transformer housing.

Cable Connector: No connector at microphone terminals; UA311 mates with end of transformer housing (Connector supplied)

Standard Accessories: Neck cord Assembly and Belt strain relief clip.

Warranty: The Electro-Voice Model 649 Microphone is guaranteed against defects in workmanship and material.

Architects' and Engineers' Specifications

The microphone shall be the Electro-Voice Model 649 or equivalent. The microphone shall be an omnidirectional, dynamic type with a nonmetallic Acoustalloy diaphragm.The microphone shall have a magnetic shield to prevent dust and iron particles from reaching the diaphragm. A uniform response from 70 to 13,000 cps shall be obtained. The microphone shall have an impedance of 50, 150 or 250 ohms. Line shall be balanced to ground and phased.

The output level shall be −62 db with 0 db equalling 6mw/10 dynes/cm². RETMA sensitivity rating shall be −155 db for 50-ohm impedance, −156 db for 150-ohm impedance, and −154 db for 250-ohm impedance. The magnetic circuit shall be a nonwelded 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 ¾ in., a length of 2-11/16 in., and a net weight of 2 oz. without cable or neck cord assemble. Finish of the microphone shall be nonreflecting gray. A 30-ft. three conductor, shielded, cotton jacketed cable shall be provided to connect the microphone to the transformer. The microphone shall be supplied with a neck cord and belt strain relief clip.

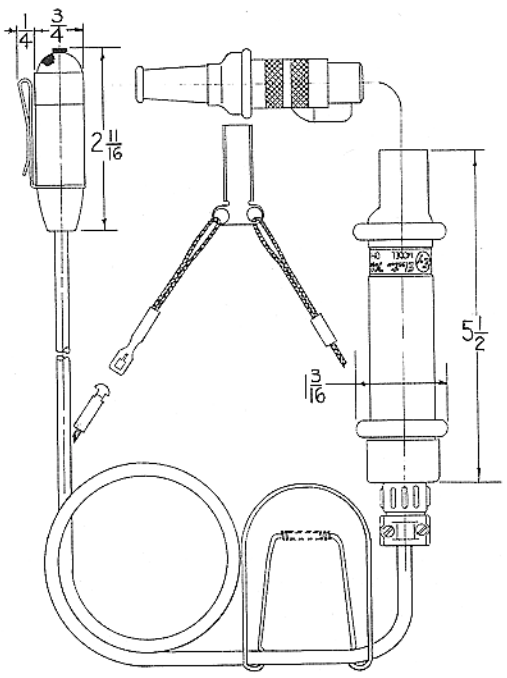


Fig. 4 — Dimensions

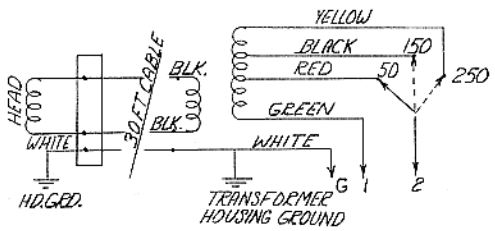


Fig. 6 — Wiring Diagram

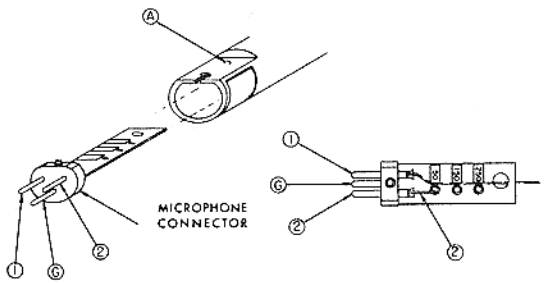


Fig. 5 — Method for Impedance Adjustment