

**DESCRIPTION AND APPLICATIONS**

The Electro-Voice Model 648 microphone is a dynamic, omnidirectional type providing smooth, wide range response and high output. Originally created for the audio console in TV and broadcast intercom, this small, slim microphone can be mounted in many ways.

The Model 648 microphone is furnished with a built-in connector and mating adapter which allows mounting on rigid or flexible boom, desk or floor stand. All leads can be concealed. The microphone is equipped with a pop-proof wire mesh grille minimizing breath blasts.

The Model 648 microphone features the exclusive Electro-Voice Acoustalloy® diaphragm. This non-metallic diaphragm permits smooth response over a wide frequency range and withstands high humidity, temperature extremes, corrosive effects of salt air, and severe mechanical shocks. It is practically indestructible with normal use.

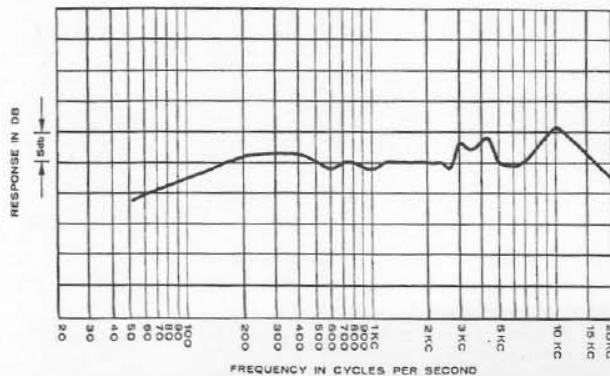


Fig. 1-Frequency Response

**SPECIFICATIONS**

- Generating Element: Dynamic
- Frequency Response: 50 to 10,000 cps
- Polar Pattern: Omnidirectional, becoming slightly directional at high frequencies.
- Impedance: Available as 150 ohms or Hi-Z. (150 ohms balanced to ground.)
- Output Level: Low impedance: -58 db\*  
EIA sensitivity rating: -152 db  
Hi-Z: -58 db\*\*  
EIA sensitivity rating: -154 db  
\* 0 db = 1 mw/10 dyne/cm<sup>2</sup>  
\*\* 0 db = 1 volt/dyne/cm<sup>2</sup>
- Diaphragm: Electro-Voice Acoustalloy®
- Magnetic Circuit: Employs Alnico V and Armco magnetic iron in a non-welded circuit
- Case: Dural aluminum
- Dimensions: Diameter: 1-1/8 inch  
Length: 5-9/16 inch
- Finish: Non-reflecting gray
- Net Weight: 7 ounces, less cable
- Cable: None supplied
- Accessories (supplied with microphone):  
2 Allen wrenches  
Model 348 Adapter
- Warranty: The Electro-Voice Model 648 microphone is guaranteed against defects in workmanship and material.

**ARCHITECTS' AND ENGINEERS' SPECIFICATIONS**

The microphone shall be a dynamic type with a non-metallic Acoustalloy diaphragm. The microphone shall have a magnetic shield to prevent dust and iron particles from reaching the diaphragm. The microphone shall be available in 150 ohm or high

**648 INTERCOM MICROPHONE**

impedance and shall have a uniform frequency response from 50 to 10,000 cps. Line shall be balanced to ground and phased on low impedance.

The output level shall be -58 db reference 1 mw/10 dynes/cm<sup>2</sup> on low impedance and 1 volt/dyne/cm<sup>2</sup> on high impedance. EIA sensitivity rating shall be -152 db for 150-ohm impedance and -154 db for high impedance. The magnetic circuit shall be a nonwelded circuit and employ Alnico V and Armco magnetic iron.

The case shall be made of Dural aluminum. The microphone shall have a diameter of 1-1/8 inch, and a length of 5-9/16 inch. The net weight of the microphone without cable shall be 7 ounces. Finish of the microphone shall be nonreflecting gray. The cable shall not be supplied.

The microphone shall be supplied with two Allen wrenches and Model 348 Adapter which includes connector. Electro-Voice Model 648 is specified.

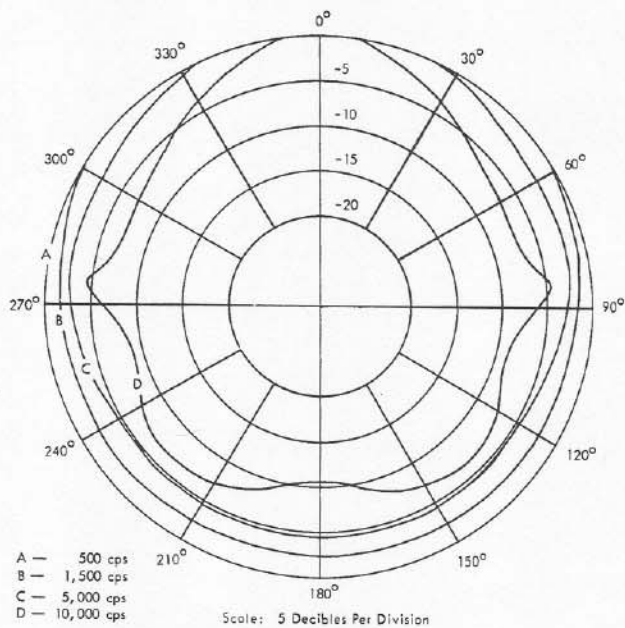


Fig. 2-Polar Pattern

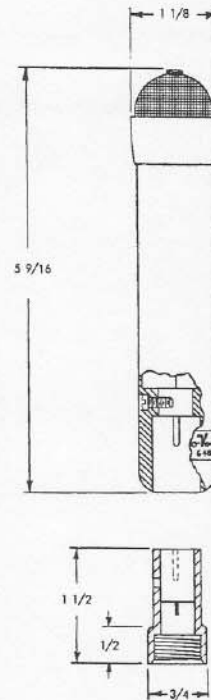


Fig. 3-Dimensions

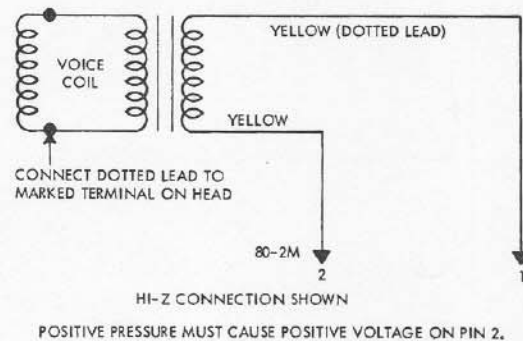


Fig. 4-Wiring Diagram