

ENGINEERING DATA

RE15 DYNAMIC CARDIOID MICROPHONE

DESCRIPTION AND APPLICATIONS

The Electro-Voice Model RE15 is a dynamic cardioid microphone created especially for the most exacting professional applications. Emphasizing a major technological breakthrough, the RE15 features a degree of directional control so effective that frequency response is virtually independent of angular location of sound source. The result is a microphone that generates no off axis coloration, yet provides greatest possible rejection of unwanted sounds. A super cardioid, the RE15 provides its greatest rejection at 150° off axis. (Typical cardioids provide greatest rejection at 180°). This assures greatest rejection in the horizontal plane when the microphone is tilted in its most natural position--30° from horizontal (as on boom or floor stand). An easily operated "bass-tilt" switch corrects spectrum balance for boom use and other longer reach situations.

Using the mechanical nesting concept of design--by means of which the internal transducer parts are nested one within another--the RE15 transducer is a nearly solid mechanical structure that is highly resistant to damage from mechanical shock. The exclusive non-metallic Electro-Voice Acoustalloy® diaphragm is virtually unaffected by extremes of atmospheric conditions. A carefully designed steel outer case provides excellent magnetic shielding, and additional mechanical protection. Finish is nonreflecting matte satin nickel.

SPECIFICATIONS

- Element: Dynamic
- Frequency Response: 80-15,000 Hz
- Polar Pattern: Super Cardioid
- Impedance: Lo-Z (150 ohms)
- Output Level: -56 db (0 db = 1 mw/10 dynes/cm²)
- EIA Sensitivity Rating: -150 db
- Diaphragm: Electro-Voice Acoustalloy®
- Case Material: Steel
- Dimensions: 6-7/16" long, 1-3/8" dia. (3/4" shank dia.)
- Finish: Non-reflecting matte satin nickel
- Net Weight: 6 oz. (not including cable)
- Cable: 18-feet, 2-conductor, shielded, broadcast type cable, synthetic rubber jacketed with Cannon XLR3-11 connector.
- Cable Connector: Cannon XL-3-12
- Accessories Furnished: Protective metal carrying case, Model 310 clamp.
- Optional Accessories: Model 311 "Snap Out" clamp.

WARRANTY

The RE15 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 RE15 exhibiting any malfunction regardless of cause, including accidental abuse. In addition, the RE15 is guaranteed for life against defects in the original workmanship and materials.

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be a cardioid dynamic type with wide-range response uniform from 80 to 15,000 Hz. Response at any angular position away from the major axis shall be essentially similar to the response on the major axis, attenuated uniformly at all frequencies, by an amount appropriate to that angular position. Attenuation at all frequencies from 200 to 15,000 Hz (referred to major axis signal value) shall exceed 24 db at 150° from major axis in any plane. Attenuation at 180° from major axis shall exceed 15 db at all frequencies. Polar characteristic shall be sufficiently uniform in all planes so that it is, effectively, a super cardioid of revolution.

An integral passive filter network shall be provided such that when filter switch is in "on" position, low-frequency response shall be so deviated from "flat" response that a rise of 6 db from 100 to 1000 Hz shall be effected. With switch in "off" position,

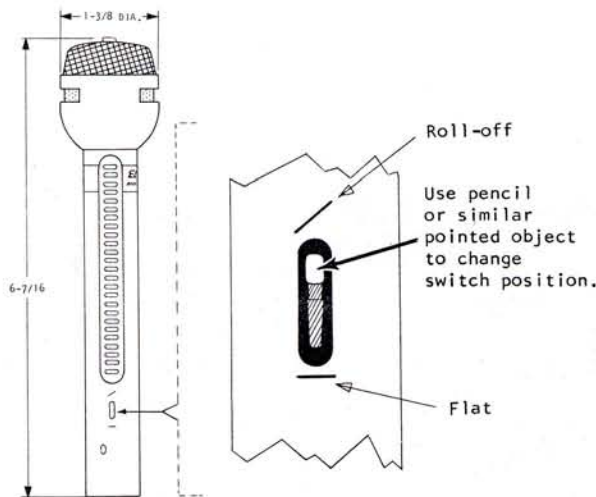


Figure 1 - Dimensions

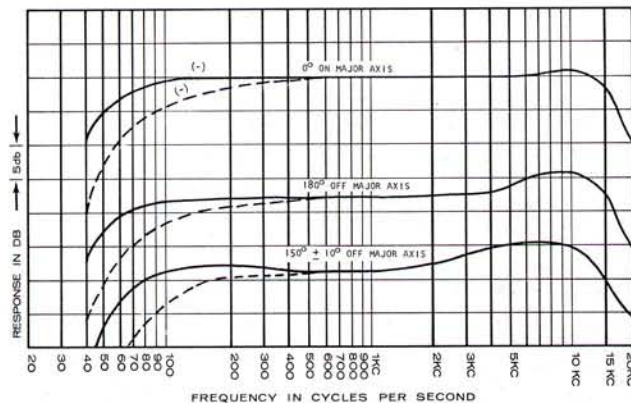
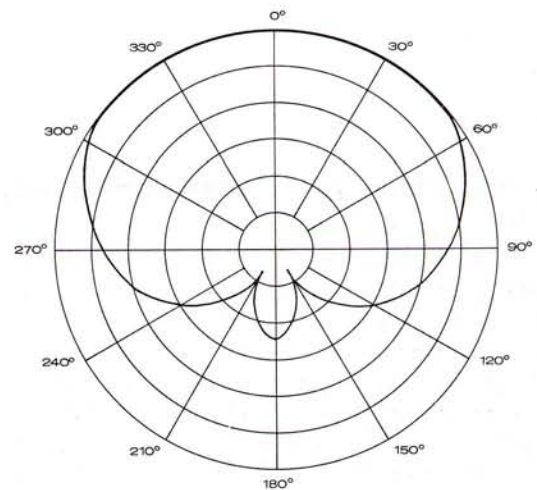


Figure 2 - Frequency response

microphone shall be essentially "flat" from 100 to 4000 Hz, with a 5 db rise in response from 50 to 100 Hz. Output level shall be -56 db (0 db = 1 mw/10 dynes/cm²), and EIA sensitivity rating shall be -150 db. The diaphragm shall be non-metallic Acoustalloy® and shall have a magnetic shield to prevent dust and iron particles from reaching the diaphragm.

The case shall be made of steel. The microphone shall have a maximum diameter of 1-3/8 inches (with 3/4" dia. shank) and a maximum length of 6-7/16 inches not including cable connector. Finish shall be non-reflecting matte satin nickel. An 18-foot, 2-conductor, shielded, broadcast type, synthetic rubber jacketed cable with Cannon XLR3-11 connector installed shall be provided. The microphone shall have a built-in connector similar or equivalent to the Cannon XL-3-12. A Model 310 stand coupler and metal carrying case shall be supplied. The Electro-Voice Model RE15 is specified.



SCALE IS 5 DECIBELS PER DIVISION

Figure 3 - Polar response

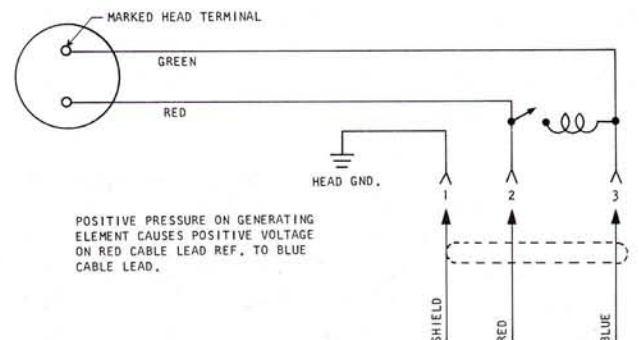


Figure 4 - Wiring Diagram