



Electro-Voice®
a MARK IV company

Model RE10

Variable-D®

Dynamic Supercardioid

Microphone

SPECIFICATIONS

Element:

Dynamic

Frequency Response:

90-13,000 Hz

Polar Pattern:

Supercardioid

Impedance:

Lo-Z (150 ohms nominal)

Output Level:

-56 dB

(0 dB = 1 mW/10 dynes/cm²)

EIA Sensitivity:

-150 dB

Diaphragm:

Electro-Voice Acoustalloy®

Case Material:

Steel

Dimensions:

172 mm (6.75 in.) long,

35 mm (1.38 in.) diameter,

19 mm (0.75 in.) shank diameter

Finish:

Fawn beige micomatte

Net Weight:

170 g (6 oz), not including cable

Cable:

4.6 m (15 ft), 2-conductor shielded,
broadcast-type cable, rubber-jacketed with
Switchcraft A3F connector

Accessories Furnished:

Model 310A stand adapter

Protective vinyl carrying pouch

Optional Accessories:

Model 307 suspension mount

Model 312A clamp

Model 314 windscreen

Model 340 security clamp

Model 368 windscreen

Model 381 switch/connector assembly

Model 400 or 422 desk stand

DESCRIPTION AND APPLICATIONS

The Electro-Voice Model RE10 is a Variable-D® dynamic supercardioid microphone created specially for professional applications requiring a sharply controlled supercardioid directional pattern. The RE10 is similar to the Model RE15, but meets requirements where there is less need for precise unit-to-unit matching of microphones. Utilizing the major technological breakthrough of Variable-D® design (a means for deriving directionality), the RE10 features a degree of directional control so effective that frequency response is virtually independent of angular location of sound source. Like the RE15, RE10 possesses a degree of directional control so effective that frequency response is virtually independent of location of sound source. The result is a microphone that generates little or no off-axis coloration, yet provides greatest possible rejection of unwanted sounds. A supercardioid, the RE10 provides 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 a 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 RE10 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 fawn beige micomatte. The RE10 has a Memraflex grille that bounces back to retain its shape.

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be a Variable-D® supercardioid dynamic type with wide range response uniform from 90-13,000 Hz. Proximity effect shall be 10 dB less at 100 Hz than with comparable Single-D designs. 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 frequencies from 200 to 3,000 Hz (referred to major axis signal value) shall exceed 20 dB at 150° from major axis in any plane at frequencies from 100 to 3,000 Hz shall exceed 13 dB. Attenuation above 3,000 Hz shall exceed 10 dB. Polar characteristics shall be sufficiently uniform in all planes so that it is effectively a supercardioid 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 fall of 6 dB from 1000 to 100 Hz shall be effected. With switch in "off" position, the microphone shall be essentially "flat" from 150 to 10,000 Hz, with an 8 dB roll off in response from 150 to 50 Hz. Output level

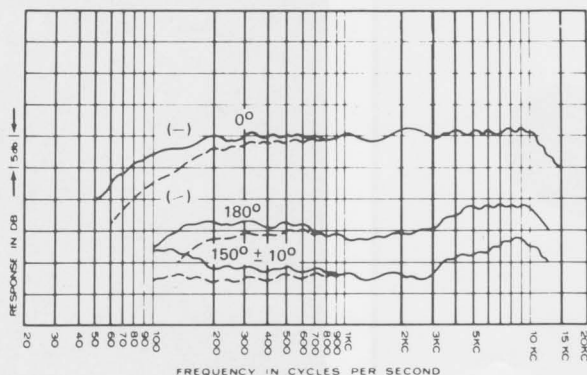


FIGURE 1 - Frequency Response

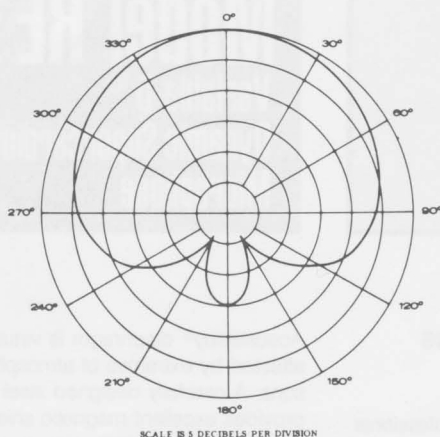


FIGURE 3 - Polar Response

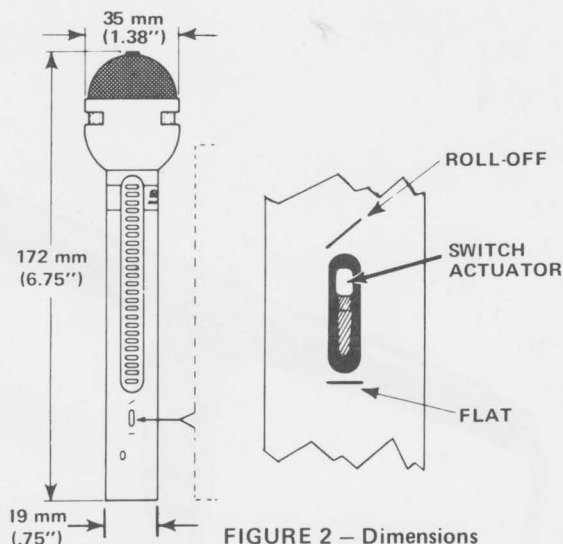


FIGURE 2 - Dimensions

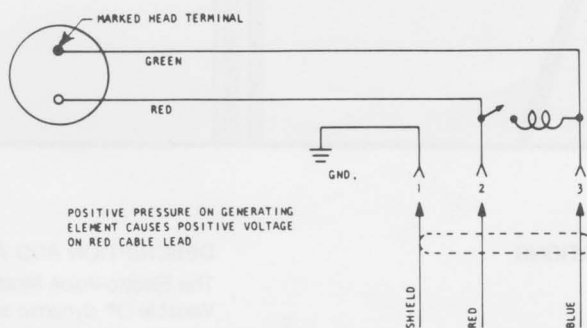


FIGURE 4 - Wiring Diagram

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 particle shield to prevent dust from reaching the diaphragm.

The case shall be made of steel. The microphone shall have a maximum diameter of 35 mm (1.38 in.), with 19 mm (0.75 in.) diameter shank, and a maximum length of 172 mm (6.75 in.), not including cable connector. Case finish shall be fawn beige micomatte. A 4.6 m (15 ft), two-conductor shielded, broadcast-type, rubber-jacketed cable shall be provided with Switchcraft A3F or equivalent connector installed. The microphone shall have a built-in connector equivalent to the Switchcraft A3M. A Model 310A stand adapter shall be supplied. The Electro-Voice Model RE10 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

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