Electro-Voice®
a gulton company

Model RE10
Variable-D® Dynamic Super-Cardioid Microphone

SPECIFICATIONS

Element:
Dynamic
Frequency Response:
90 to 13,000 Hz
Polar Pattern:
Super cardioid
Impedance:
Lo-Z (150 ohms nominal)
Output Level:
–56 dB
(0 dB = 1 mW/10 dynes/cm^2)
EIA Sensitivity Rating:
–150 dB
Diaphragm:
Electro-Voice Acoustalloy®
Case Material:
Steel
Dimensions:
172 mm (6.75 in.) long
35 mm (1.38 in.) maximum diameter
19 mm (.75 in.) shank diameter
Finish:
Fawn beige micomatte
Net Weight:
170 g (6 oz), not including cable
Cable:
4.6 m (15 foot), two-conductor shielded, rubber-jacketed, broadcast type cable with Switchcraft A3F connector
Accessories Furnished:
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 cardioid microphone created specially for professional applications requiring a sharply controlled super cardioid 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, the 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 the greatest possible rejection of unwanted sounds. A super cardioid, 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® super cardioid 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 all 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. Attenuation above 3,000 Hz shall exceed 18 dB. Attenuation at 180° 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 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 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 shall be −56 dB (0 dB = 1 mW/10 dynes/cm^2), 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 (.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 foot), 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 Broadcast, Recording, and Sound Reinforcement Microphones are guaranteed unconditionally 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 materials. (Any active electronics incorporated in a microphone are guaranteed for three years from date of original purchase 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 cover finish, appearance items, cables, cable connectors, or switches. Defect guarantee does not cover malfunction due to abuse or operation at other than specified conditions. Repair by other than Electro-Voice or its authorized service agencies will void this guarantee.

For repair information and service locations, please write: Service Dept., Electro-Voice, Inc., 600 Cecil Street, P.O. Box 186, Buchanan, MI 49107 (Phone: 616/695-6831) or Electro-Voice West, 8234 Doe Ave., P.O. Box 3297, Visalia, CA 93277 (Phone: 209/625-1330,-1).

Electro-Voice also maintains complete facilities for non-warranty service of E-V products.

Specifications subject to change without notice.

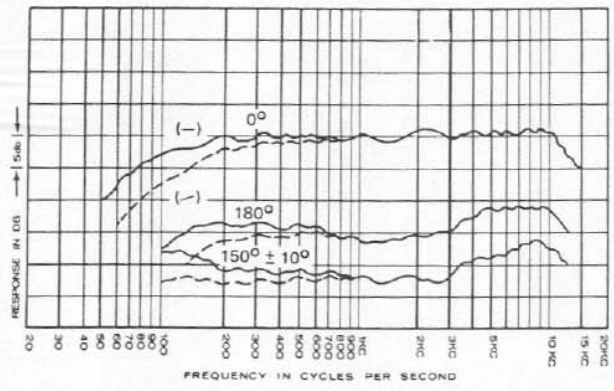
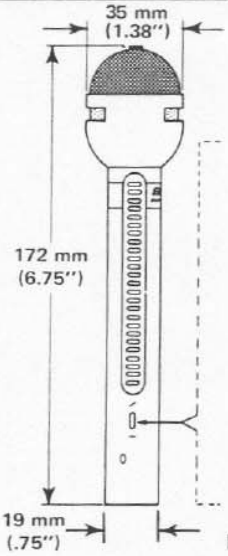


FIGURE 1 – Frequency Response



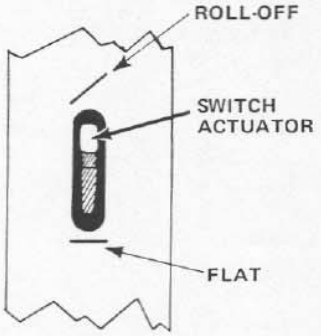


FIGURE 2 – Dimensions

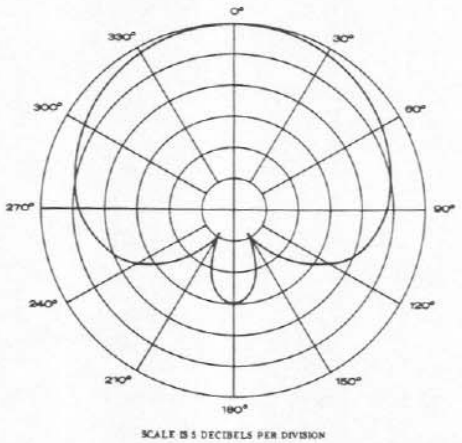


FIGURE 3 – Polar Response

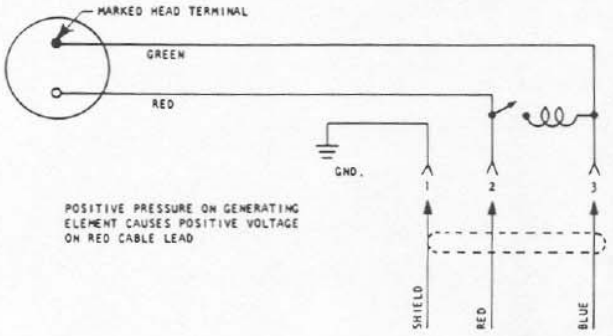


FIGURE 4 – Wiring Diagram

Part Number 530221 – 217