RE10 DYNAMIC CARDIOID MICROPHONE

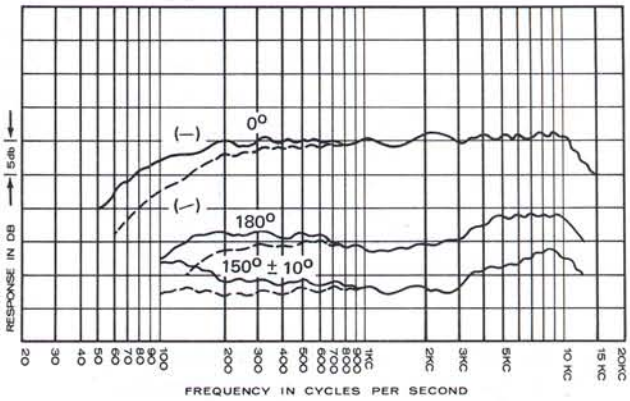

Figure 1–Frequency Response

DESCRIPTION AND APPLICATIONS

The Electro-Voice Model RE10 is a dynamic cardioid microphone created especially 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. 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. Case finish is fawn beige micomatte with black trim.

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:	6¾" long, 1-3/8" dia. (¾" shank diameter)
Finish:	Fawn beige micomatte with black trim
Net Weight:	6 oz., not including cable
Cable:	18-foot, 2-conductor, shielded, synthetic rubber-jacketed, broadcast type cable with Switchcraft A3F connector
Accessories Furnished:	310 stand adapter, and protective metal carrying case
Optional Accessories:	311 "Snap-Out" stand adapter, Model 421 or 422 desk stand, Model 307 suspension mount Model 314 windscreen

WARRANTY

The RE10 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 RE10 exhibiting any malfunction regardless of cause, including accidental abuse. In addition, the RE10 is guaranteed for life against defects in the original workmanship and materials.

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be a super-cardioid dynamic type with wide-range response uniform from 90 to 13,000 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 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 rise in response from 50 to 150 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 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 ¾" diameter shank) and a maximum length of 6¾ inches, not including cable connector. Case finish shall be fawn beige Micomatte with black trim. An 18-foot, 2-conductor, shielded, broadcast type, synthetic 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 310 stand adapter and metal carrying case shall be supplied. The Electro-Voice Model RE10 is specified.

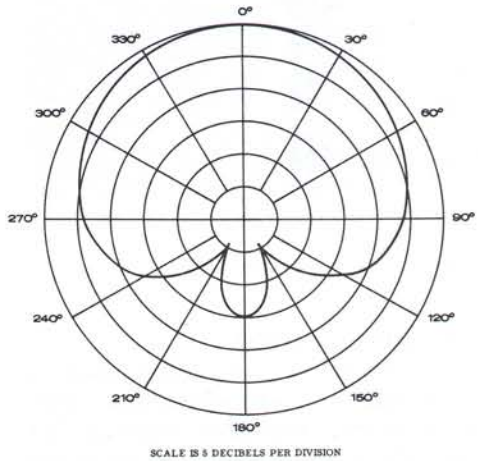

Figure 3—Polar Response

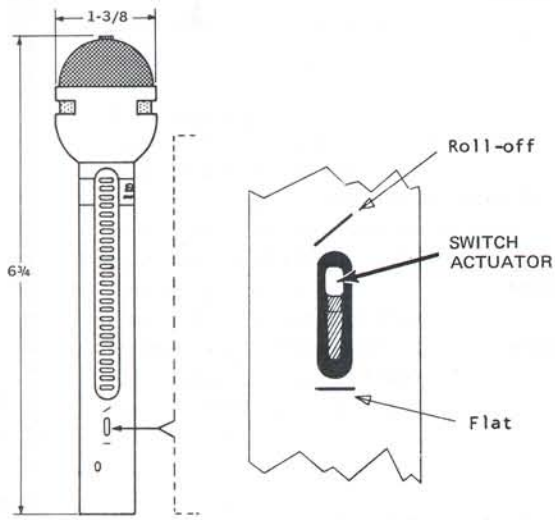

Figure 2—Dimensions

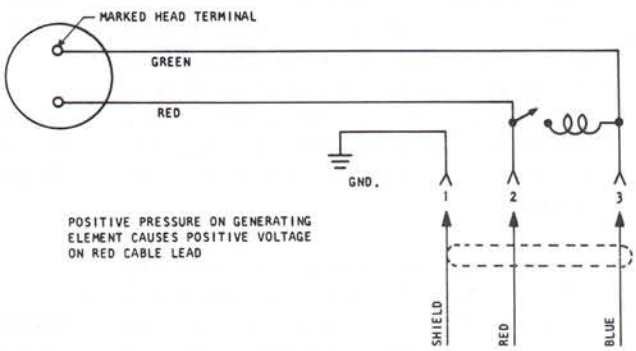

Figure 4—Wiring Diagram