



RE15

Variable-D® Dynamic Supercardioid Microphone

- Reduced proximity effect
- Small camera profile
- Little off-axis coloration
- Supercardioid pattern
- Hum-bucking coil and steel case
- Bass roll-off switch
- Extremely rugged and reliable

Description and Applications

The Electro-Voice RE15 is a Variable-D® dynamic supercardioid microphone created specially for the most exacting professional applications. Utilizing the major technological breakthrough of Variable-D® design (a means for deriving directionality), the RE15 features a degree of directional control so effective that frequency response is virtually independent of the angular location to the 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 RE15 provides its greatest rejection at 150° off axis. 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). (Typical cardioids provide greatest rejection at 180°.) An easily operated "bass-tilt" switch corrects spectrum balance for boom use and other longer-reach situations.

An additional advantage of the unique Variable-D® design is the near elimination of proximity effect. All Single-D microphones exhibit a proximity effect (bass boost) when the microphone is closer than 12 inches to the sound source. The RE15 Variable-D®

reduces proximity effect from the Single-D microphone's typical 15 dB at 100 Hz to less than 5 dB at 100 Hz.

A "hum-bucking" coil has been added to the RE15 (see Figure 4), in addition to its screw-machined steel outer casing, to ensure rejection of hum under all conditions. When a dynamic microphone is subjected to extremely heavy magnetic fields such as those caused by ac currents due to heavy stage lighting, proximity to power transformers, or many other conditions which occur under remote operation, it has a tendency to pick up hum. The hum-bucking coil in the RE15 gives an additional 25 dB of hum rejection. Hum pickup level is -125 dB (re: .001 gauss field).

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 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 a fawn beige.

Architects' and Engineers' Specifications

The microphone shall be a Variable-D® supercardioid dynamic type with wide range response uniform from 80-15,000 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 100-4,000 Hz (referred to major axis signal value) shall exceed 25 dB at 150° from major axis in any plane. Attenuation above 4,000 Hz shall exceed 20 dB. Attenuation at 180° from major axis in any plane at frequencies from 100-4,000 Hz shall exceed 15 dB. Above 4,000 Hz, attenuation shall exceed 12 dB. Polar characteristic 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 1,000 to 100 Hz shall be effected. With switch in "off" position, micro-

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phone shall be essentially "flat" from 100-15,000 Hz, with a 6-dB rise in response from 50-100 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 nonmetallic Acoustalloy[®] and shall have a 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 167 mm (6.57 in.). Finish shall be a fawn beige. Stand adapter shall be supplied. The Electro-Voice RE15 is specified.

Uniform Limited Warranty

Electro-Voice products are guaranteed against malfunction due to defects in materials or workmanship for a specified period, as noted in the individual product-line statement(s) below, or in the individual product data sheet or owner's manual, beginning with the date of original purchase. If such malfunction occurs during the specified period, the product will be repaired or replaced (at our option) without charge. The product will be returned to the customer prepaid.

Exclusions and Limitations: The Limited Warranty does not apply to: (a) exterior finish or appearance; (b) certain specific items

described in the individual product-line statement(s) below, or in the individual product data sheet or owner's manual; (c) malfunction resulting from use or operation of the product other than as specified in the product data sheet or owner's manual; (d) malfunction resulting from misuse or abuse of the product; or (e) malfunction occurring at any time after repairs have been made to the product by anyone other than EVI Audio Service or any of its authorized service representatives. **Obtaining Warranty Service:** To obtain warranty service, a customer must deliver the product, prepaid, to EVI Audio Service or any of its authorized service representatives together with proof of purchase of the product in the form of a bill of sale or receipted invoice. A list of authorized service representatives is available from EVI Audio Service at 600 Cecil Street, Buchanan, MI 49107 (800/234-6831 or FAX 616/695-4743). **Incidental and Consequential Damages Excluded:** Product repair or replacement and return to the customer are the only remedies provided to the customer. Electro-Voice shall not be liable for any incidental or consequential damages including, without limitation, injury to persons or property or loss of use. Some states do not allow the exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you. **Other Rights:**

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

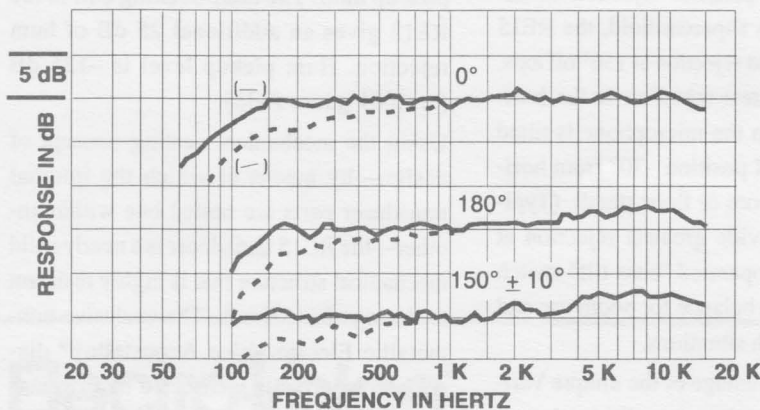
Electro-Voice Wired Microphones are guaranteed against malfunction from any cause for two (2) years from the date of original purchase. In addition, the Limited Warranty for the acoustic system contained in these microphones shall apply for the life of the product, defined as a period of ten (10) years from the date that the manufacture of the specific microphone has been discontinued. Any and all active electronics incorporated in these microphones are guaranteed against malfunction due to defects in materials or workmanship for a period of three (3) years from the date of original purchase. The Limited Warranty does not extend to cables, cable connectors, or switches. Additional details are included in the Uniform Limited Warranty statement.

For warranty repair, service information, or a listing of the repair facilities nearest you, contact the service repair department at: 616/695-6831 or 800/685-2606.

For technical assistance, contact Technical Support at 800/234-6831 or 616/695-6831, M-F, 8:00 a.m. to 5:00 p.m. Eastern Standard time.

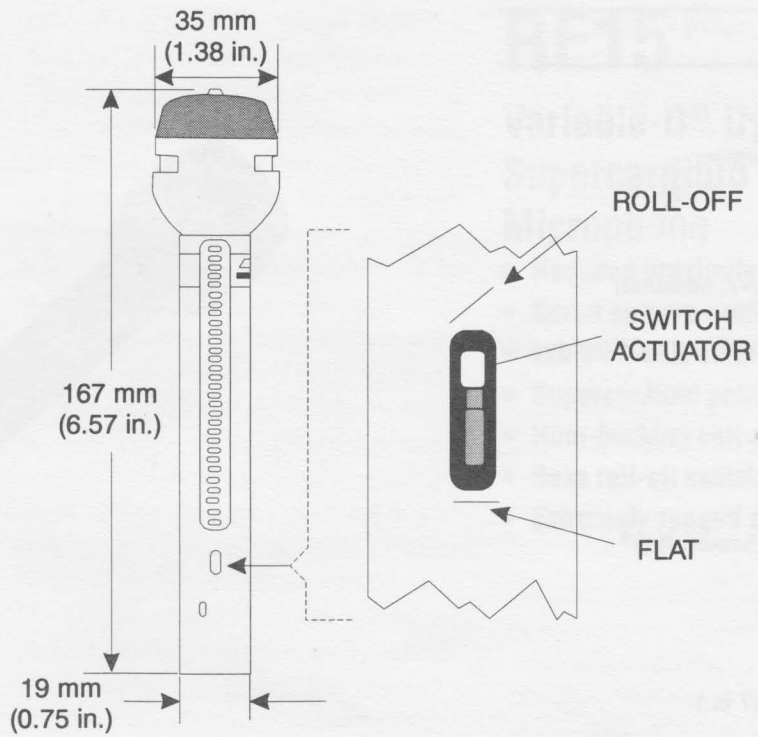
Specifications subject to change without notice.

Figure 1—Frequency Response



RE 15 Variable-D[®] Dynamic Supercardioid Microphone

Figure 2—Dimensions



RE 15 Variable-D[®] Dynamic Supercardioid Microphone

Figure 3—Polar Response

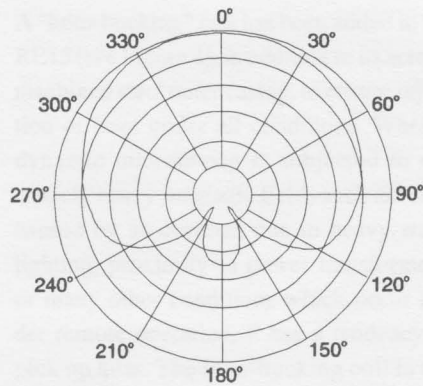
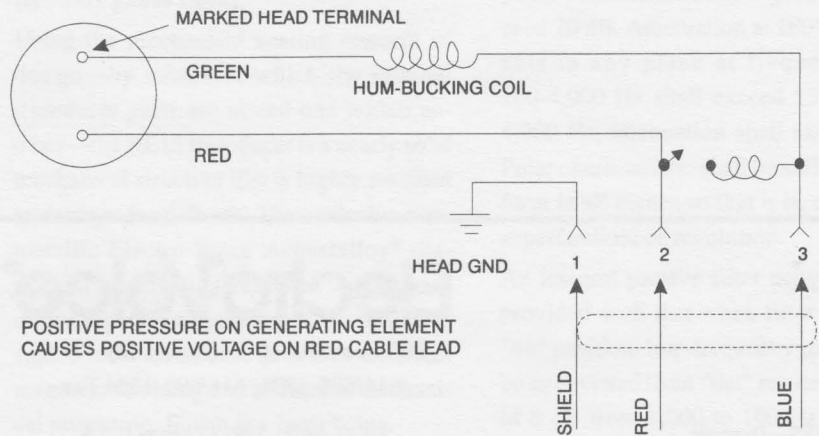


Figure 4—Wiring Diagram



RE 15 Variable-D® Dynamic Supercardioid Microphone

Specifications

Element:

Dynamic

Frequency Response:

80-15,000 Hz

Polar Pattern:

Supercardioid

Impedance, Low-Z nominal:

150 ohms

Output Level, (0 dB = 1 mW/10 dynes/

cm²):

-56 dB

EIA Sensitivity:

-150 dB

Diaphragm:

Electro-Voice Acoustalloy®

Case Material:

Steel

Dimensions,**Length:**

167 mm (6.57 in.)

Diameter:

35 mm (1.38 in.)

Shank diameter:

19 mm (0.75 in.)

Finish:

Fawn beige

Net Weight:

170 g (6 oz)

Accessories Furnished:

Stand adapter

Protective pouch

Optional Accessories:

307A suspension mount

313A shock mount

314 windscreen

340 security stud adapter

422A desk stand

Electro-Voice®

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