

**Electro-Voice®**  
a gulton company

## Model RE55 Dynamic Omnidirectional Microphone

### SPECIFICATIONS

#### Generating Element:

Dynamic

#### Frequency Response:

40 to 20,000 Hz

#### Polar Pattern:

Omnidirectional

#### Impedance:

Lo-Z (150 ohms)

#### Output Level:

-57

(0 dB = 1 mW/10 dynes/cm<sup>2</sup>)

#### EIA Sensitivity:

-150 dB

#### Diaphragm:

Electro-Voice Acoustalloy®

#### Case Material:

Steel

#### Dimensions:

266.7 mm (10.50") long (overall)

30.9 mm (1.22") major diameter

19 mm (.75") shank diameter

#### Finish:

Fawn beige micomatte

#### Net Weight:

241 g (8.50 oz), without cable

#### Cable:

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

#### Cable Connector:

Mates with Switchcraft A3F

#### Accessories Furnished:

Model 310A clamp

Vinyl pouch

### Optional Accessories:

Model 307 suspension mount

Model 312A stand adapter

Model 340 security clamp

Model 342 stud mount adapter

Model 355A windscreen

Model 400 desk stand

Model 422 desk stand

### DESCRIPTION

The Electro-Voice Model RE55 is a dynamic omnidirectional microphone designed for the most demanding professional applications. Ideal for boom or stand mounting in recording and broadcast use, it is excellent also for close-up hand held use in stage and interview situations.

Smooth, wide range response, high output level, and low sensitivity to mechanical shock, combined with functional "easy to hold" styling, make the RE55 one of the most versatile professional microphones ever created. The nonreflecting, fawn beige micomatte finish eliminates hot spots for "on camera" use.

This microphone features the exclusive, non-metallic Electro-Voice Acoustalloy® diaphragm that assures very smooth frequency response and is impervious to damage from extremes of temperature and humidity.

### APPLICATIONS

The RE55, an omnidirectional microphone, is outstanding in those situations where uniform sensitivity in all directions is desirable.

1. Frequency response, flat and uniform across the entire usable range makes the RE55 a good choice for:
  - a. Symphony and other wide range recording situations where reverberation is not a problem.
  - b. Calibration for use as a secondary standard for acoustic measurements.
2. Small diameter (3/4" shank) makes the RE55 comfortable and convenient for hand held use by:
  - a. Vocalists, for stage and television work.
  - b. News reporters for interviews.

### DIRECTIVITY INDEX

Directivity Index (Figure 4) is computed from polar curves run at each one-third octave center frequency across the frequency range.  $D_i$  shows directivity in dB with respect to on-axis frequency response and may be applied to the on-axis response to show power response. (See Acoustical Engineering, Olsen, pp 331 & 332). This data is useful in predetermining regenerative feedback conditions for directional elements and random incidence response for omnidirectional elements.



ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be an omni-directional, dynamic type with wide range frequency response, uniform from 40 to 20,000 Hz. The diaphragm shall be non-metallic Acoustalloy and shall have a magnetic shield to prevent dust and magnetic particles from reaching the diaphragm. The impedance shall be such that the microphone will match all low impedance inputs (50 to 250 ohms). The line shall be balanced to ground and phased.

The output level shall be -57 dB (0 dB = 1 mW/10 dynes/cm<sup>2</sup>). EIA sensitivity rating shall be -150 dB. The case shall be made of steel. Overall length of the microphone shall be 266.7 mm (10.50"). Major diameter shall not exceed 30.9 mm (1.22"), and minor (or shank) diameter shall not exceed 19 mm (.75"). Finish shall be nonreflecting fawn beige micomatte. A 4.6 m (15'), 2-conductor, shielded, broadcast type,

rubber-jacketed cable with Switchcraft A3F connector installed, shall be provided. The microphone shall have a built-in cable connector such that it will mate with the Switchcraft A3F. A Model 310A stand clamp shall be supplied. The Electro-Voice Model RE55 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 is 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 Department, Electro-Voice, Inc., 600 Cecil Street, Buchanan, Michigan 49107 (Phone 616/695-6831) or Electro-Voice West, 8234 Doe Avenue, Visalia, CA 93277 (209/625-1330,-1).

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

Specifications subject to change without notice.

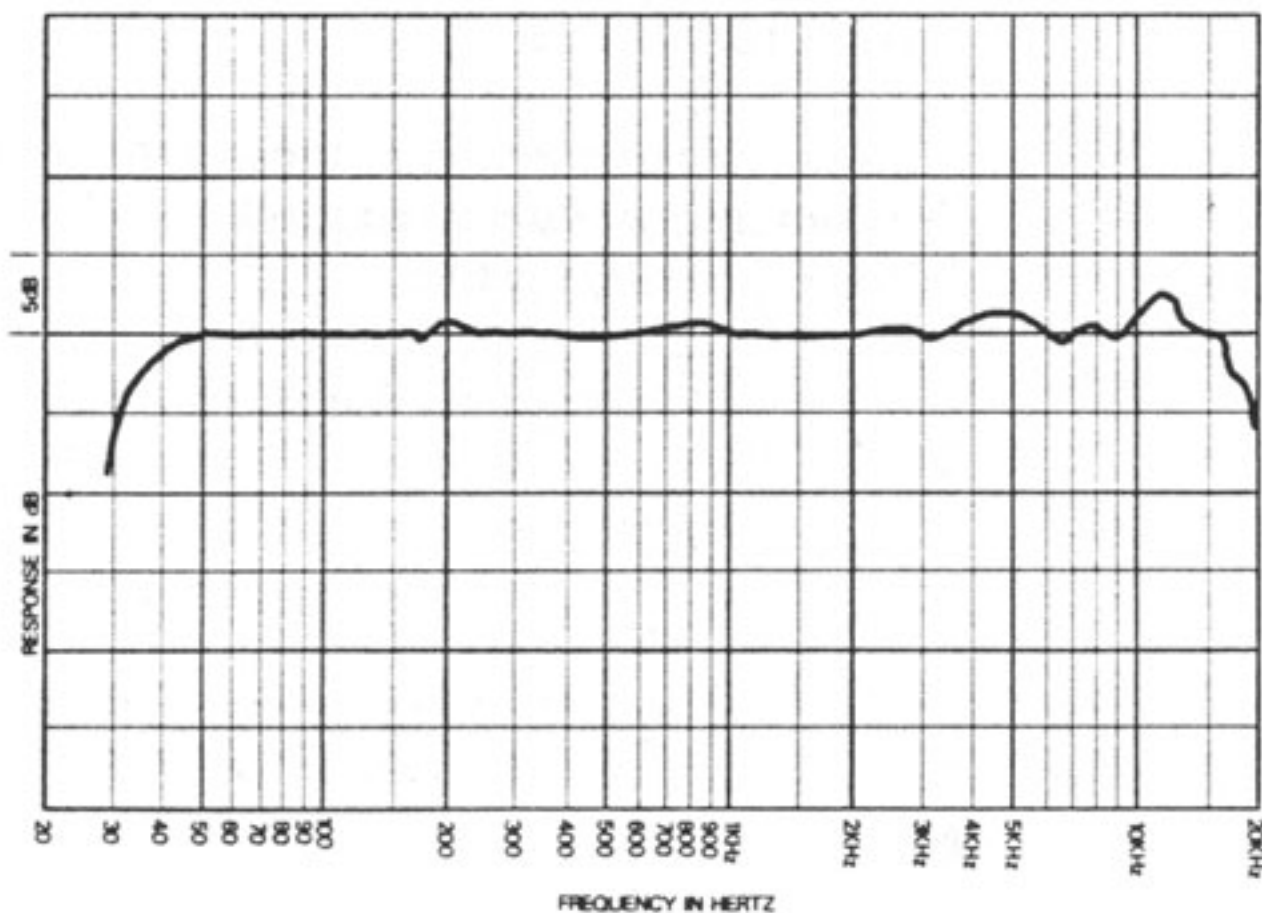


FIGURE 1 — Axial Response

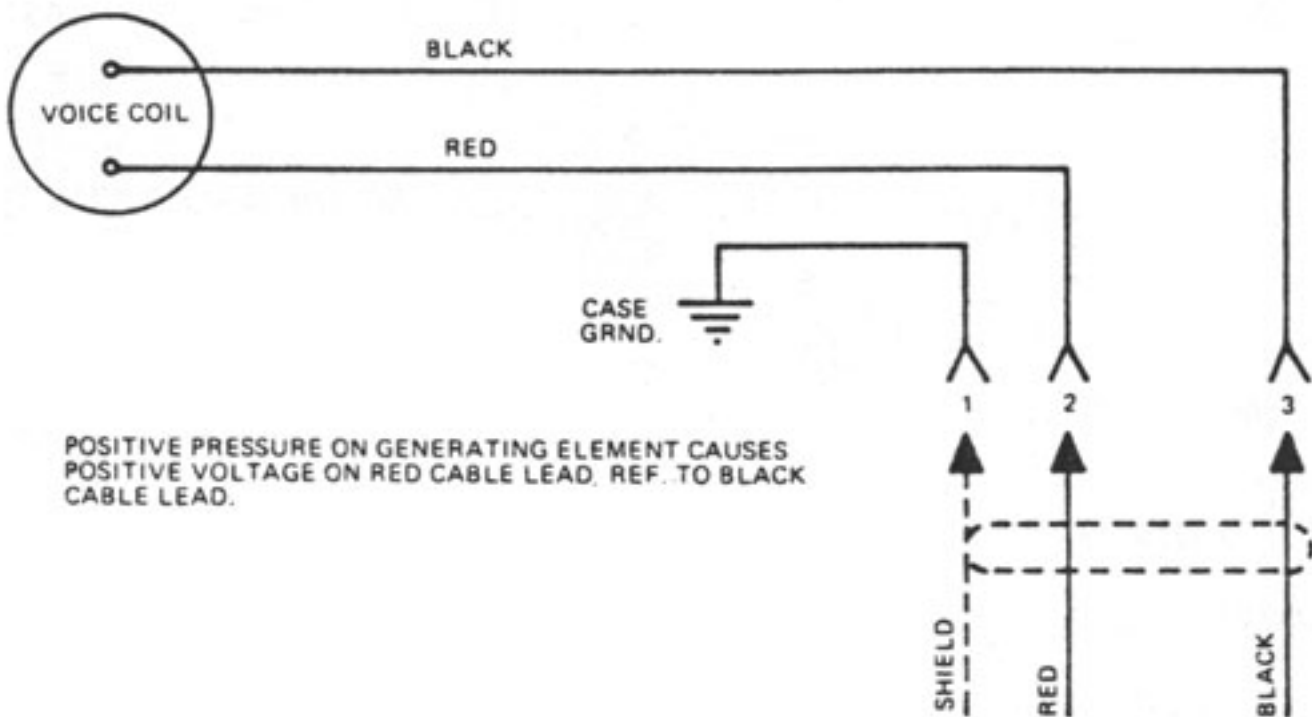


FIGURE 2 — Wiring Diagram

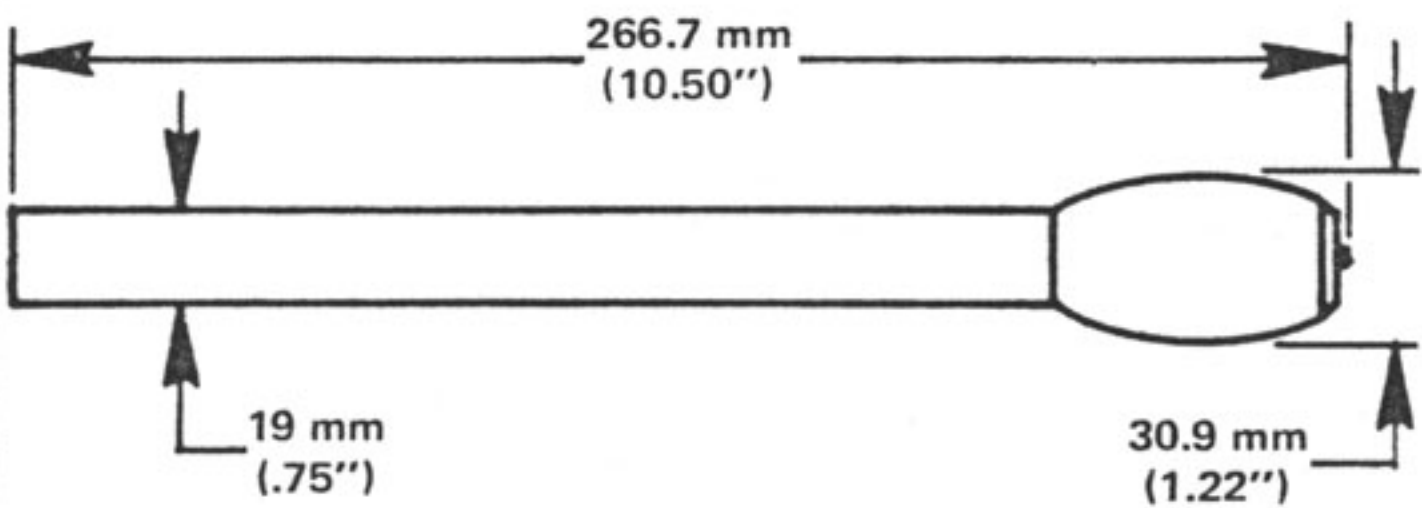


FIGURE 3 — Dimensions

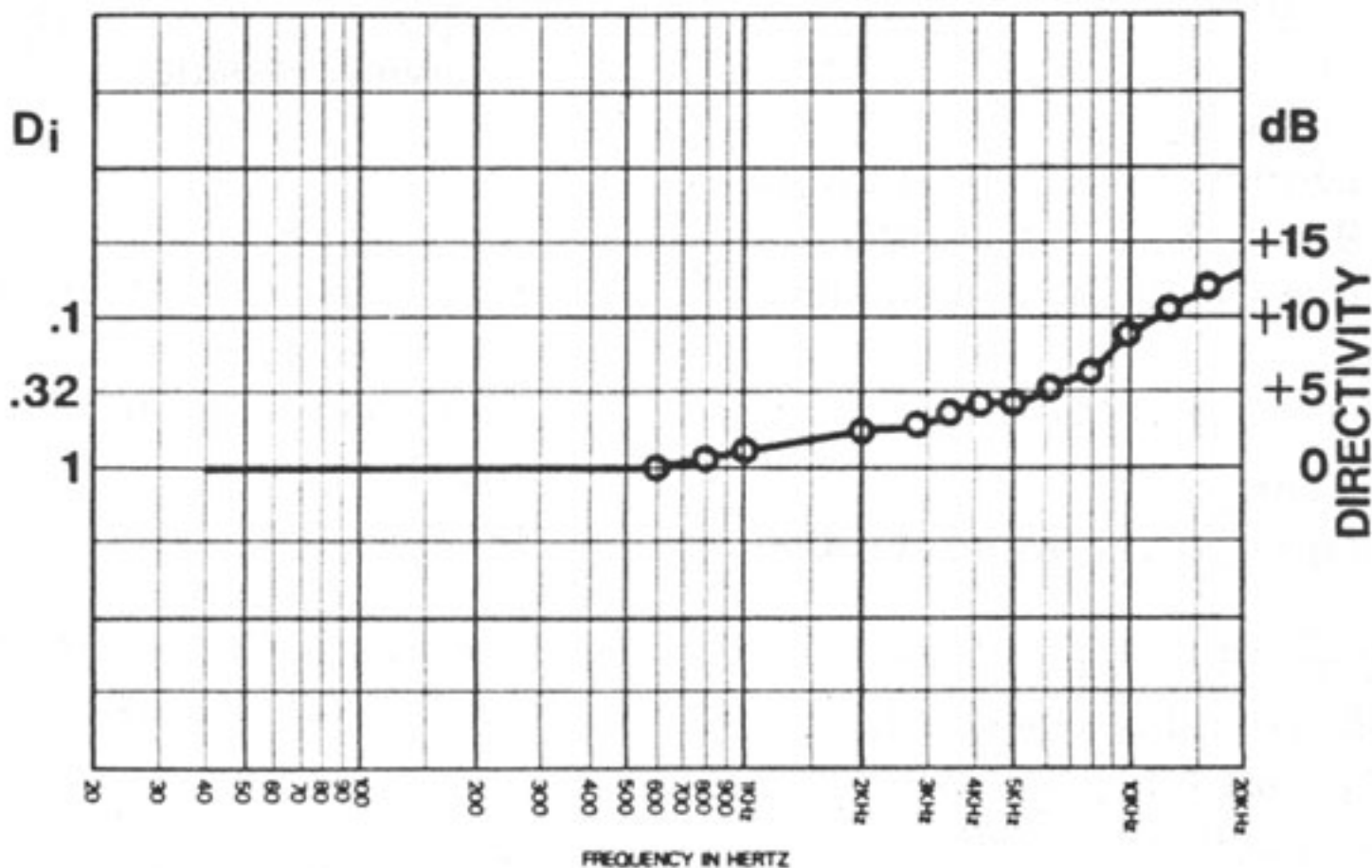


FIGURE 4 — Directivity Index