



## RE27N/D

### Variable-D® N/DYM® Dynamic Cardioid Microphone

- Studio condenser performance from self-generating transducer
- Consummate announce microphone
- Ideal for sampling
- Switch-selected E.Q.
- Effective internal shock, pop and wind protection
- Exceptional sensitivity assures high signal to noise

#### Description

The Electro-Voice RE27N/D is a professional-quality dynamic cardioid microphone designed for broadcast production announce and voice-over, high-quality recording and sound reinforcement applications. The RE27N/D utilizes a revolutionary neodymium-alloy magnet and a reinforced diaphragm dome, a combination offering increased sensitivity (up to 6-dB more output), undistorted output at high sound pressure levels and an extended high-frequency response.

The exceptional sensitivity of the RE27N/D, excellent transient response and inherently low noise of the dynamic transducer, all combine to ensure a superior signal-to-noise ratio, easily comparable to the finest condenser cardioid microphones. To further reduce noise, a highly effective hum-bucking coil is used to attenuate hum from lighting and other sources. The RE27N/D's continuously Variable-D® design reduces bass-boosting "proximity effect" to maintain a uniform low-frequency response, up-close or at a distance. Two easily operated bass roll-off switches, offering a sharp low-frequency cut at 200 Hz or a gentle roll-off, are available for special situations where bass attenuation is required.

A third switch is available for reducing the high-frequency treble boost. The true, uniform cardioid polar pattern of the RE27N/D offers the greatest rejection at 180° off axis, ensuring superior gain-before-feedback.

An integral blast and wind filter covers each acoustic opening on the RE27N/D, allowing "close-talk" situations with no worry of "P-pop," breath sounds or excessive sibilance. Part of the filter also shock mounts the internal microphone transducer, reducing the transfer of vibration from external sources. This shock-mount system along with the extremely rugged exterior steel casing allows the RE27N/D to withstand all the rigors of professional use.

#### Architects' and Engineers' Specifications

The microphone shall be a dynamic cardioid with integral blast filter protecting all acoustic openings. The blast filter shall also serve as a shock mount for the internal microphone transducer. The microphone shall have a wide-range uniform frequency response from 45-20,000 Hz.

Integral passive networks, controlled with three recessed slide switches, shall be provided with switches in the "flat" position, the

microphone shall be essentially flat from 80-2,000 Hz with a 6-dB rise in response from 2,000-16,000 Hz. With one filter switch in the "roll-off" position, low-frequency response shall tilt down 6 dB from 250 to 100 Hz. A second filter switch, when in the "roll-off" position, shall have a gentle roll-off of 12 dB from 1,000 to 100 Hz. The third filter switch, when in the "roll-off" position shall decrease the high-frequency rise by 3 dB.

The open circuit voltage sensitivity shall be 3.1 mV/Pascal at 1,000 Hz and the power level sensitivity shall be -51 dB at 1,000 Hz (0 dB equals 1 mW/pascal.) The magnetic circuit shall be a nonwelded circuit and employ a neodymium alloy magnet. The transducer shall employ a hum-bucking coil, with a resulting hum sensitivity of -130 dBm at 60 Hz in a 1 millioersted field, and a shield to prevent dust and iron particles from reaching the diaphragm. Rated impedance shall be 150 ohms. Line shall be balanced to ground and phased. Pin 2 shall have a positive voltage with reference to Pin 3 with positive pressure on the diaphragm.

Response at any angular position away from the major axis shall be essentially similar to the response on the major axis, except uniformly at all frequencies by an amount ap-

# RE27N/D Variable-D<sup>®</sup> N/DYM<sup>®</sup> Dynamic Cardioid Microphone

appropriate to that angular position. Polar characteristics shall be sufficiently uniform in all planes so that it is, effectively, a cardioid of revolution.

The case shall be made of steel. The microphone shall have a maximum diameter of 54.4 mm (2.14 in.), a body diameter of 49.2 mm (1.94 in.) and a length of 216.7 mm (8.53 in.). The finish shall be nonreflecting satin nickel. A stand clamp shall be supplied. The Electro-Voice RE27N/D is specified.

## Uniform Limited Warranty Statement

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.

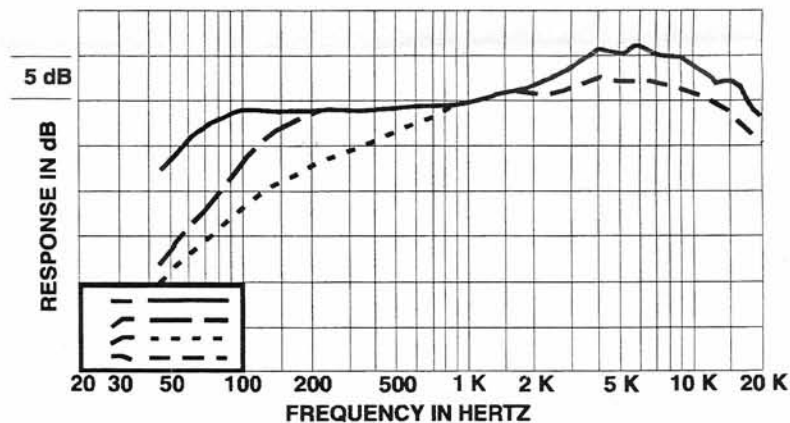
For warranty repair, service information, or a listing of the repair facilities nearest you, contact the service repair department at: 616/695-6831 or 800/685-2606.

**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.

RE27N/D Variable-D<sup>®</sup> N/DYM<sup>®</sup> Dynamic Cardioid Microphone

Figure 1—Frequency Response



# RE27N/D Variable-D® N/DYM® Dynamic Cardioid Microphone

Figure 2—Wiring Diagram

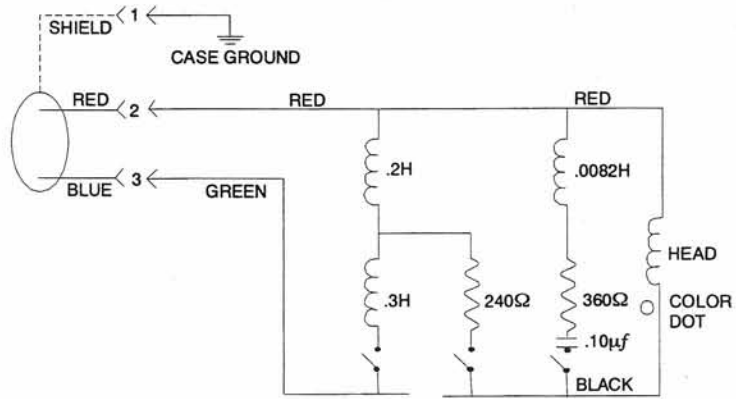


Figure 3—Dimensions

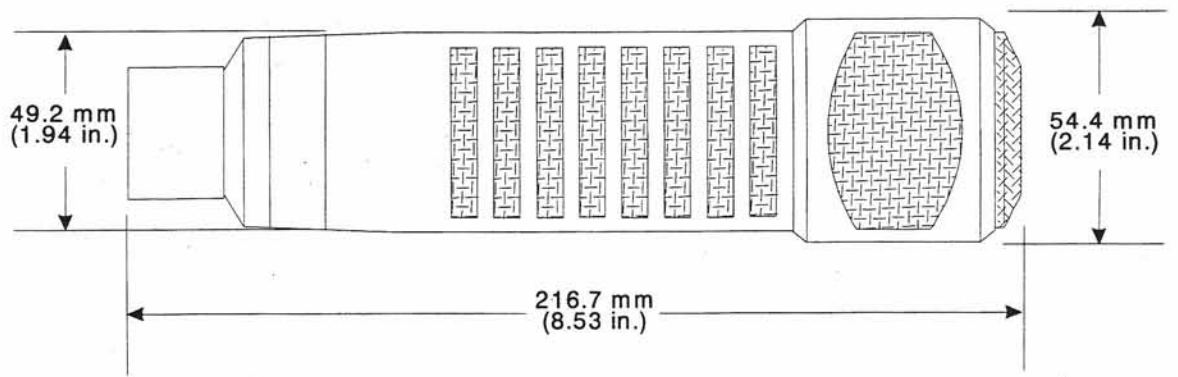


Figure 4—Polar Response

Scale is 5 decibels per division

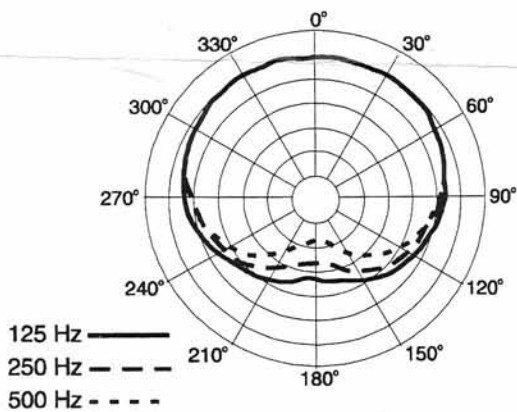
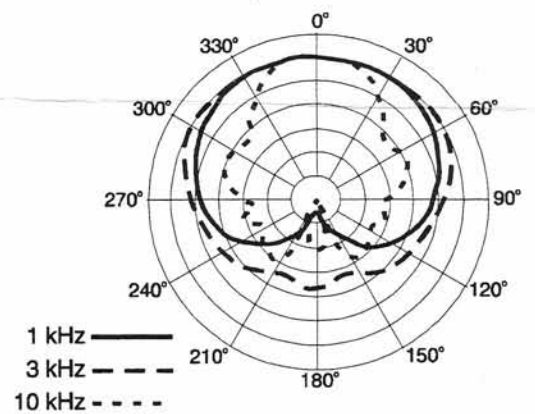


Figure 5—Polar Response

Scale is 5 decibels per division



RE27N/D Variable-D® N/DYM® Dynamic Cardioid Microphone

# RE27N/D Variable-D<sup>®</sup> N/DYM<sup>®</sup> Dynamic Cardioid Microphone

## Specification

### Generating Element:

Dynamic

### Frequency Response (see Figure 1):

45-20,000 Hz

### Polar Pattern (see Figures 4 and 5):

Cardioid

### Impedance:

150 ohms balanced

### Sensitivity,

#### Open Circuit Voltage:

3.1 mV/pascal = 1 kHz

### Power Level, 1 kHz (0 dB = 1mV/pascal):

-51 dB

### Hum Pickup Level, typical (60 Hz/ 1 millioersted field):

-130 dBm

### Magnetic Circuit:

N/DYM<sup>®</sup> magnet in a nonwelded circuit

### Phasing:

Pin 2 will be positive referenced to Pin 3 with positive pressure on diaphragm

### Case Material:

Steel

### Dimensions (see Figure 3),

#### Length:

216.7 mm (8.53 in.)

#### Widest Diameter:

54.4 mm (2.14 in.)

### Body Diameter:

49.2 mm (1.94 in.)

### Finish:

Satin nickel

### Net Weight:

709 g (1 lb, 9 oz)

### Shipping Weight:

1,446 g (3 lb, 3 oz)

### Accessories Furnished:

81715 stand clamp

### Optional Accessories:

309A shock-mounted stand adapter for use with floor stand or recording boom

RE27N/D Variable-D<sup>®</sup> N/DYM<sup>®</sup> Dynamic Cardioid Microphone

# Electro-Voice<sup>®</sup>

600 Cecil Street, Buchanan, MI 49107

616/695-6831, 616/695-1304 Fax

©EVI Audio, 1997 • Litho in U.S.A.