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



#### **Key Features:**

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



### **General 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 bassboosting "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, insuring superior gain-beforefeedback. 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.

#### **Technical Specifications:**

Generating Element:	Dynamic N/DYM Magnet Structure
Frequency Response:	45 - 20,000 Hz
Polar Pattern:	Cardioid
Impedance:	150 ohms balanced
Sensitivity, Open Circuit Voltage:	2.52 mV/pascal = 1 kHz
Power Level, 1 kHz (0 dB = 1 mV/Pascal):	-51 dB
Hum Pickup Level, typical (60 Hz/ 1 millioersted field):	-130 dBm
Polarity:	Pin 2 will be positive referenced to Pin 3 with positive pressure on diaphragm
Case Material:	Steel
Dimensions,	
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



### **Frequency Response:**



## 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 2.52 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 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.

# Wiring Diagram:



### **Polar Response:**





**Ev** Electro-Voice®

12000 Portland Avenue South, Burnsville, MN 55337 Phone:952/884-4051, Fax:952/884-0043

www.electrovoice.com © Telex Communications, Inc. 10/2009 Part Number 534679 Rev F



U.S.A. and Canada only. For customer orders, contact Customer Service at: 800/392-3497 Fax: 800/955-6831 Europe, Africa, and Middle East only. For customer orders, contact Customer Service at: + 49 9421-706 0 Fax: + 49 9421-706 265

+ 49 9421-706 0 Fax: + 49 9421-706 265 Other International locations. For customer orders, contact Customer Service at:

+ 1 952 884-4051 Fax: + 1 952 736-4212

For warranty repair or service information, contact the Service Repair department at:

800/553-5992 or 402/467-5321

For technical assistance, contact Technical Support at: 800/392-3497 or 952/736-4656

Specifications subject to change without notice.