# Electro-Voice®



# N/D957

## N/DYM® Dynamic Supercardioid Vocal Microphone

- Washable and disinfectable grille screen
- · EV exclusive personality switch
- · Highest gain before feedback
- Response optimized for live vocal use
- Elastomeric shock mount for low mechanical noise
- EV exclusive Warm-Grip™ handle

## Description

The Electro-Voice N/D957 is a supercardioid dynamic microphone ideally suited for vocal usage in live sound reproduction for large and small concert sound venues. The characteristics of the N/D957 have been optimized to dramatically reduce feedback under live performance conditions, particularly with typical monitor speaker placements, ensuring superior gain-before-feedback. The N/D957 utilizes a revolutionary neodymium alloy to form the EV-exclusive N/DYM magnet. With a computer-optimized design, the N/DYM® magnetic structure is maximized in the N/D957 to provide unprecedented output sensitivity over conventional dynamic designs. The exceptional sensitivity of the N/D957 combined with the inherently low noise of a dynamic transducer insures superior signal-to-noise which is ideal for digital recording and sampling. To further reduce noise, a highly effective hum-bucking coil is used to cancel hum from lighting and other power sources.

The N/DYM magnet geometry combined with a reinforced diaphragm design forms a smooth, extended frequency response with a warm, open, transparent sound quality only found in studio-quality microphones.

The N/D957 microphone features an advanced version of the AcoustiDYMTM shock-mount system. This unique vibration-isolation system works as a multistage device. At low frequencies, a rear sound wave cancels the diaphragm motion, while at high frequencies the specially designed rubber shock mount isolates the transducer from motion. To work optimally in concert-sound applications, the AcoustiDYMTM shock mount is tuned to a low-resonant frequency. A custom transformer limits the low-frequency response and adjusts the impedance. This combination has been matched to preserve the accurate reproduction of the voice range. Combining AcoustiDYMTM, custom transformer, the elastomeric Warm-Grip™ handle and windscreen bumper, an advanced-technology vibration-isolation system is formed which dramatically reduces all forms of handling noise for the most demanding situa-

The N/D957 has a unique personality switch to fit the demands of live sound. In the normal position, the microphone exhibits a very smooth slightly rising response. This provides a fuller sound and is preferred where the microphone is used several inches from the lips. In the presence position, the mid frequencies are slightly attenuated. This

gives the microphone more cut when used with high level monitors or when used in a lips-touching-the-screen fashion.

The microphone has a washable grille screen and two-stage pop filter to reduce wind blast noise, a problem especially troublesome where extended-response woofer systems are used. Within the grille screen is a stainless-steel retainer which holds the hygienic pop filter in position for reducing explosive wind blasts. The stainless-steel retainer and hygienic pop filter makes cleaning and disinfecting the grille screen a simple task, desirable for on-the-road use where stage makeup and perspiration often enter the microphone.

The N/D957 has a broadband supercardioid polar pattern. Compared to the more traditional, heart-shaped cardioid pattern, a supercardioid pattern rejects more sound at the sides and rear overall. The N/D957 also features improvements to the transducer that increase sensitivity and provide an extremely uniform polar pattern throughout the vocal frequency range. These characteristics tend to reduce feedback under live performance conditions, particularly with typical monitor speaker placements, ensuring superior gain-before-feedback in live applications.

## N/D957 Dynamic Supercardioid Vocal Microphone

The dynamic element of the N/D957 provides reliable operation in humidity and temperature extremes. The metal handle is covered with the unique Warm-Grip<sup>TM</sup> handle. This design provides the strength, light weight and comfort wanted for on-stage handheld usage. The Memraflex<sup>TM</sup> grille screen is made from a specially hardened material to resist damage. This all-metal-core construction will provide years of trouble-free, on-theroad operation.

The exceptional sensitivity of the N/D957 combined with the inherently low noise of a dynamic transducer ensures a superior signal-to-noise ratio ready for high-dynamic-range sound systems.

### Operation

The switch-selected response of the N/D957 allows the user the option of adding more presence to the sound when needed. The normal position provides a slightly rising response when the microphone is positioned further than 12 inches from the sound source. The low-frequency response can be extended by positioning the microphone closer to the sound source. This "proximity effect" occurs when the microphone is placed less than 12 inches from the sound source and increases as the distance is reduced. The presence position reduces the mid-frequency response to improve clarity when the microphone is used very close to the sound source. where the "proximity effect" can overwhelm the output.

#### Certified Performace

Every N/D957 is inspected by a quality-control tester and subjected to a computer-controlled test system that verifies many different performance parameters. After the performance meets or exceeds our rigorous standards, the actual measured frequency

response of the unit tested is plotted on a "Certificate of Performance" and included with the microphone. Certified performance response may vary from published "Average Response." This certificate guarantees that each N/D957 will perform to the exacting standards established by EV design engineers — 100% quality-assurance testing.

### 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 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.

## N/D957 Dynamic Supercardioid Vocal Microphone

Figure 1—Frequency Response

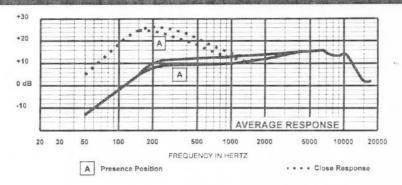
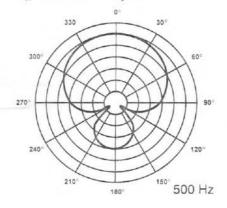
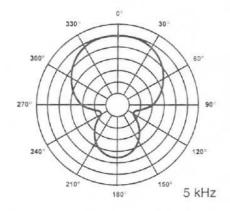


Figure 2-Polar Response





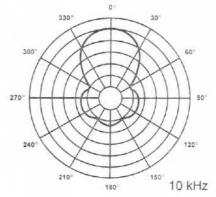
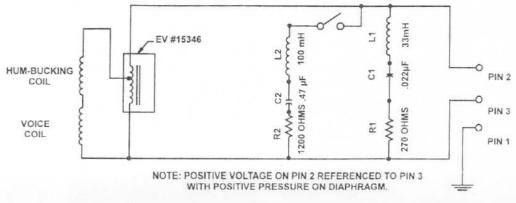


Figure 3—Schematic



50 to 13,000 Hz

Far Response:

120 to 13,000 Hz

Polar Pattern (see Figure 2):

Supercardioid

Sensitivity,

Open Circuit Voltage:

4.0 mV/pascal @ 1,000 Hz

Power Level (measured at 1,000 Hz):

-52 dB

N/D957 Dynamic Supercardioid Vocal Microphone

(0 dB = 1 mW/pascal)

Dynamic Range:

142 dB

**Equivalent Output Noise:** 

(0 dB = .00002 pascal)

Impedance (measured at 1,000 Hz):

Rated: 600 ohms balanced (low-Z)

Case,

Grille:

Steel Memraflex 1M

Inner Handle:

Aluminum

Sleeve:

Elastomeric

Accessories Included:

Warm-Grip™ handle

323S stand clamp

Carrying case

Dimensions,

Length:

173 mm (6.80 in.)

Diameter:

52 mm (2.05 in.)

Shank:

20 mm (0.80 in.)

Finish:

Nonreflecting black

Net Weight:

205 g (7.23 oz)

Shipping Weight:

600 g (1.32 lb)

Electro-Voice®

600 Cecil Street, Buchanan, MI 49107 616/695-6831, 616/695-1304 Fax