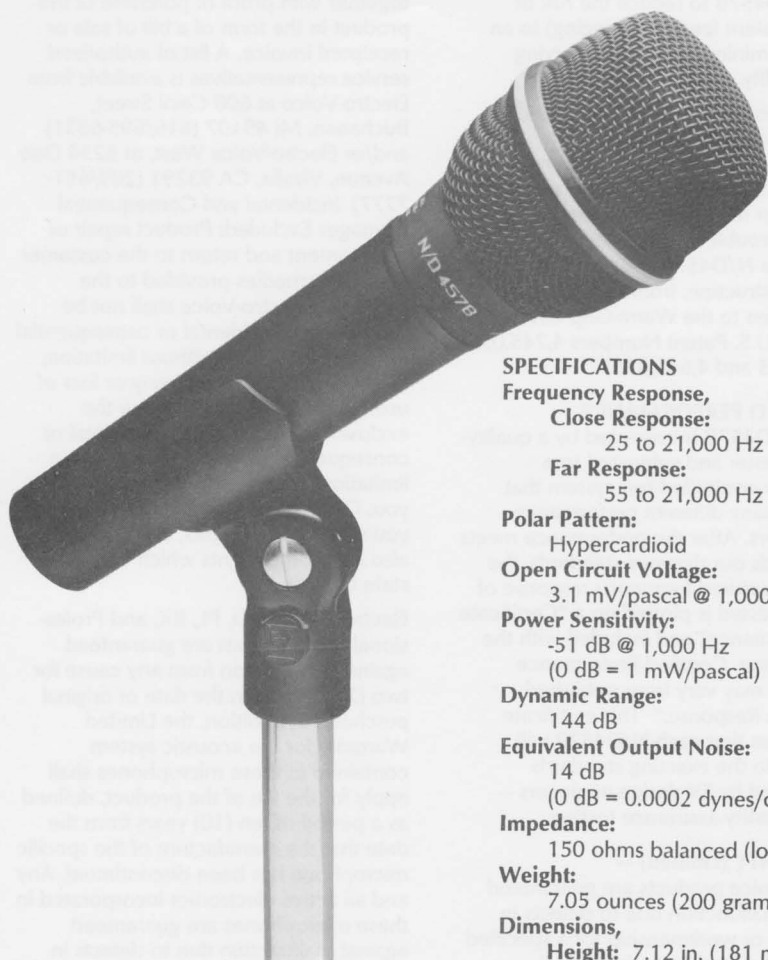


# N/D 457B

## Hypercardioid Dynamic Vocal Microphone



### SPECIFICATIONS

**Frequency Response,**  
**Close Response:**

25 to 21,000 Hz

**Far Response:**

55 to 21,000 Hz

**Polar Pattern:**

Hypercardioid

**Open Circuit Voltage:**

3.1 mV/pascal @ 1,000 Hz

**Power Sensitivity:**

-51 dB @ 1,000 Hz

(0 dB = 1 mW/pascal)

**Dynamic Range:**

144 dB

**Equivalent Output Noise:**

14 dB

(0 dB = 0.0002 dynes/cm<sup>2</sup>)

**Impedance:**

150 ohms balanced (lo-Z)

**Weight:**

7.05 ounces (200 grams)

**Dimensions,**

**Height:** 7.12 in. (181 mm)

**Diameter:** 2.05 in. (52 mm)

**Shank:** 0.80 in. (20 mm)

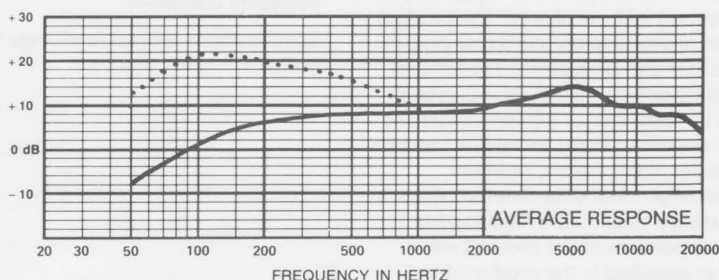
The Electro-Voice N/D457B is a hypercardioid dynamic microphone ideally suited for vocalist in live sound reproduction for large and small venues where ambient sound pressure levels are extreme "hard rock" and gain-before-feedback is a problem. The N/D457B utilizes a revolutionary neodymium alloy to form the EV-exclusive N/DYM® magnet. With a computer-optimized design, the N/DYM magnetic structure is maximized in the N/D457B to provide 6 dB more output sensitivity over conventional designs. The exceptional sensitivity of the N/D457B combined with the inherently low noise of a dynamic transducer insures superior signal-to-noise ratio ready 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.

N/DYM Series III microphones feature the AcoustiDYM™ 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. Combining AcoustiDYM with the elastomeric Warm-Grip™ handle and windscreens bumper forms an advanced technology vibration-isolation system which dramatically reduces all forms of handling noise for the most demanding situations.

The N/D457B has a hypercardioid polar pattern offering exceptional off-axis rejection, for maximum stage-monitor levels. Compared to the more traditional, heart-shaped cardioid pattern, or a supercardioid pattern, a hypercardioid rejects more sound at the sides and rear overall. These characteristics tend to reduce feedback under typical live performance conditions. Also, the N/D457B's polar patterns are unusually uniform with frequency, insuring superior

### FREQUENCY RESPONSE



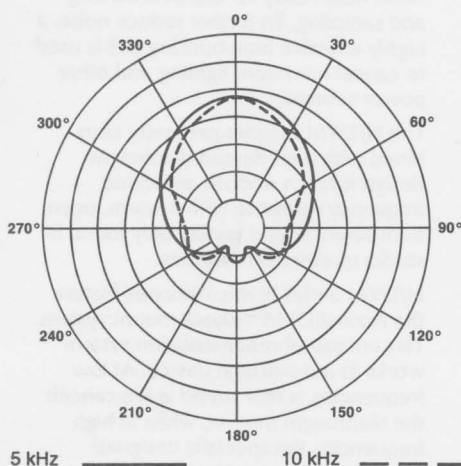
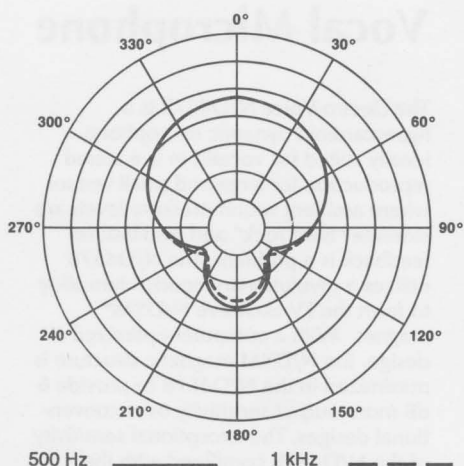
See "Certificate of Performance"  
(provided with microphone) for actual response

..... Close Response

**N/DYM® III**

# N/D 457B

## POLARS



gain-before-feedback in live applications and superior isolation in the studio.

The N/DYM Series III pop filter is a unique design utilizing a combination of two materials — Acoustifoam™ and a high-density fabric — to form a material composite which maximizes rejection of both wind noise and vocal P-pops. This design makes the pop filter an integral part of the microphone's removable front grille assembly, allowing easy cleaning for continued top performance.

### OPERATION

The N/D457B has been specially tuned to provide exceptional off-axis rejection and gain-before-feedback for live "lips-touching" applications. The low-frequency response of the N/D457B is extended in this position, as

documented by the specification section. This proximity effect begins when the microphone is placed within 12 inches of the sound source and increases as the working distance is reduced. The low-frequency response is tailored to provide bass boost without the "boominess" of many directional microphones. Thus, closer working distances can be used with N/D457B to reduce the risk of sound system feedback (ringing) to an absolute minimum while preserving intelligibility.

The dynamic element of the N/D457B will provide reliable operation in humidity and temperature extremes — adverse conditions that would render condenser microphones useless. For years of trouble-free operation "on-the-road," the N/D457B utilizes an all-metal-core construction, from the hardened windscreens to the Warm-Grip covered handle. (U.S. Patent Numbers 4,745,020, 4,824,715 and 4,646,873)

### CERTIFIED PERFORMANCE

Every N/D457B 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/D457B will perform to the exacting standards established by EV design engineers — **100% quality-assurance testing.**

### WARRANTY (Limited) —

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 Electro-Voice or any of its authorized service representatives. Obtaining Warranty Service: To obtain warranty service, a customer must deliver the product, prepaid, to Electro-Voice 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 Electro-Voice at 600 Cecil Street, Buchanan, MI 49107 (616/695-6831) and/or Electro-Voice West, at 8234 Doe Avenue, Visalia, CA 93291 (209/651-7777). Incidental and Consequential Damages Excluded: Product repair or replacement and return to the customer are 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 N/D, PL, BK, and Professional 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.

Specifications subject to change without notice.



**ELECTRO-VOICE, INC., 600 Cecil Street, Buchanan, Michigan 49107**

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