General Product Description

Designed specifically for horns, drums, acoustical and electric guitars, the N/D468 provides a smooth, natural sound, capturing the excitement of the instrument. The supercardioid pattern provides superior rejection and acoustic isolation in any application. An innovative EV design harnesses the increased power of a neodymium based magnet design, allowing a large-diameter voice coil (up to 50% larger than other mics) for dynamic, efficient microphone performance. N/DYM[®] offers the power and clarity to "cut through the mix." Whatever your instrument application the N/D468 is sure to be a top performer.

- Designed specifically for musical instruments Flexible mechanical design for optimum positioning
- Supercardioid pattern for exceptional acoustic isolation and feedback rejection
- Accurate response, even in high sound pressure levels (SPL)
- Rugged steel construction for exceptional durability

Operation

The low frequency response of the N/D468 microphone varies with the distance from the sound source. Known as "proximity effect," maximum bass response is produced in "close-up" use with the microphone 1/4 inch from the sound source. Normal bass response is experienced with working distances greater than 24 inches. Working close to the microphone will produce a more robust sound. Close up positioning of the microphone will also reduce the potential for feedback from the sound reinforcement system. When close-miced, the bass-boost provides an increase in overall microphone output level. The mixer gain may be proportionately reduced, resulting in a reduction of the system's sensitivity to feedback caused by sound entering the microphone from the loudspeakers.

Microphone Use and Placement

Please note that micing techniques are a matter of personal preference.

These are merely guidelines to assist in the placement of the microphone to gain optimal performance.

Usage	Optimal Placement
Electric Guitar and Bass Guitar Amplifier	Place microphone approximately 1-2" from and at a 90° degree angle to the speaker cone. To reduce boominess, move the microphone off axis to the cone from 90° to 45°, or move mic from center of cone to either edge.
Tom-Toms	On double headed Toms place mic over the top of drum 1-3" and at a 45° angle to the drum surface and 1-2" in from the drum edge. On single headed Toms use above method or place mic inside Tom from underneath at a 90° angle from the center of head, 3-5", away.
Snare Drum	Place mic 1-3" above the heads, 1-2" in from the rim. Aim each mic at the top heads angled down about 45°. If the drum rings, tape deadening material to the head or use damping rings. For more "snare" sound place a 2nd mic underneath aimed up at the bottom of head.
Cymbals	Place microphone one to two feet above the top of cymbals.
High-Hat	Place 5 inches above outside edge at a 45° down angle.
Brass	6-24" away, and on axis with the bell of the instrument.
Acoustic Guitar	Place mic 6-12" from where finger board joins the body.

Instrumental Microphone

N/D468







EVERYWHERE^{**}

N/D468 Instrumental Microphone

Specifications

 .	
Element	Dynamic
	N/DYM [®] magnet structure
Frequency Response	
Close Response	30 Hz to 22 kHz
Far Response	60 Hz to 22 kHz
Polar Pattern	Supercardioid
Impedance	Low-Z balanced (150 Ohms)
Sensitivity	
Open Circuit Voltage	3.1 mV/Pascal @ 1.0 kHz
Power Level	(0 dB=1mW/pascal) -51dB @ 1.0 kHZ
Microphone Connector	3-pin, XLR-type
Equivalent Output Noise	14 dB A weighted (0 dB=0.00002 pascal)
Polarity	Positive pressure on diaphragm causes
-	Positive voltage on pin 2 ref. Pin 3
Finish	Non-reflecting black
Materials	
Memraflex [™] grille screen	
Dimensions	
Length	@ 4.5 in. (115 mm)
Diameter	@ 2.05 In. (52 mm)
Shank	@ 0.80 in. (20 mm)
Weight	
Net	@ 6.7oz (190 q)
Shipping	@ 16 oz (453 g)
Accessories included	· · ·
311 stand clamp	
Soft zippered "gig" bag	

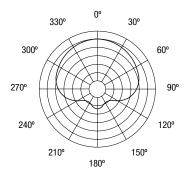
Standard Placement & Use Guidelines

- 1. Always point the microphone at the desired source of sound, and away from any unwanted sources.
- 2. The microphone should be located close to the sound source to minimize interference from other potential sound sources.
- 3. Use the 3-to-1 rule when using multiple microphones. Place each microphone three times farther from other microphones as from the desired sound source.
- 4. Minimize over-handling of the microphone to reduce unwanted mechanical noise.
- 5. Working close to the microphone will increase the bass tone and also provide increased gain-before-feedback.

Warranty

This product is 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 the microphone shall apply for the life of this product, defines as a period of ten (10) years from the date that the manufacture of this microphone model has been discontinued. Any and all active electronics incorporated in this microphone are guaranteed against malfunction due to material workmanship for a period of three (3) years from the date of original purchase. This Limited Warranty does not extend to cables, connectors, or switches.

For warranty service please call us at: 616-695-6831 or 1-800-234-6831





E V E R Y W H E R E ^{**}

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+30

+20

+10

0 dB

30 50

100

200

500

FREQUENCY IN HERTZ

1000

20

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U.S.A. and Canada only. For customer orders, contact the Customer Service department at 800/392-3497 Fax: 800/955-6831 For warranty repair or service information, contact the Service Repair department at 800/685-2606 For technical assistance, contact Technical Support at 800/392-3497 Please refer to the Engineering Data Sheet for warranty information. Specifications subject to change without notice.

AVERAGE RESPONSE

5000

10000

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20000