



**W I R E D  
MICROPHONE**

## N/D478 User Manual

The N/D478's acoustic response presents optimal performance in both a live sound or studio environment. The new "vocally optimized bass" or VOB™ technology provides the instrumentalist with reduced resonant distortion at low frequencies. Critical damping of the low frequency resonant peak has resulted in a microphone that replaces the "muddiness" found in competitive models with greater warmth and increased clarity. The result is an exceptional performing instrument microphone with clean, clear, consistent sound that "cuts through the mix."

- VOB™ technology provides tailored bass response for controlled "proximity effect" and exceptional sound clarity
- Excellent choice for mic'ing acoustical or electrical instruments whether in a live sound or studio environment
- Neodymium based magnet provides greater sensitivity and signal to noise ratio
- Cardioid pattern for superior feedback rejection and acoustic isolation
- Warm Grip™ handle for comfortable feel and lower handling noise

### Operation

The low frequency response of the N/D478 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 ¼ 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 mic'ing 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.

## 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.

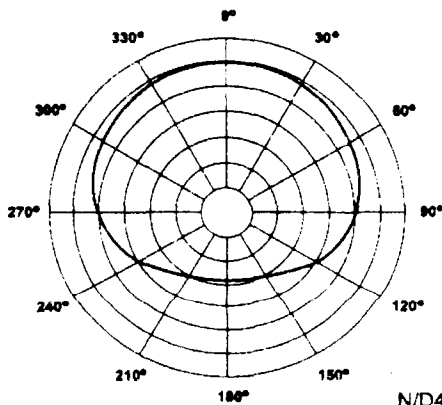
## Warranty

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



## N/D478 Specifications

**Element:** ..... Dynamic,  
N/DYM<sup>®</sup> magnet structure

### Frequency Response:

Close Response: ..... 45Hz to 15kHz

Far Response: ..... 100Hz to 15kHz

**Polar Pattern:** ..... Cardioid

**Impedance:** ..... Low-Z balanced (300 Ohms)

### Sensitivity:

Open Circuit Voltage: ... 2.9 mV/Pascal @ 1.0kHz

Power Level: ..... (0 dB=1mW/pascal) -51.5 dB

**Microphone Connector:** ..... 3-pin, XLR-type

**Polarity:** ..... Pin 2 positive, referenced to pin 3  
with positive pressure on diaphragm

**Finish:** ..... Non-reflecting black

### Materials:

Memraflex<sup>™</sup> grille screen

Warm-Grip<sup>™</sup> handle

### Dimensions:

Length: ..... @ 6.7 in. (181 mm)

Diameter: ..... @ 1.6 in. (52 mm)

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

### Weight:

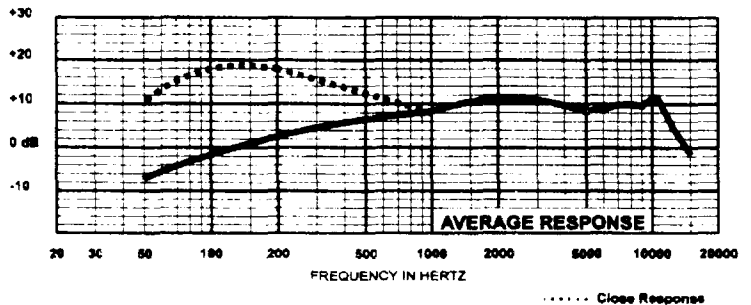
Net: ..... @ 8.7 oz (247 grams)

Shipping: ..... @ 18.6 oz (545 grams)

### Accessories included:

Stand adapter (black)

Soft zippered 'gig' bag



N/D478



EVERYWHERE<sup>™</sup>

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