Key Features:

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



General Description:

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 a exceptional performing instrument microphone with clean, clear, consistent sound that "cuts through the mix."

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 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.

Technical Specifications:

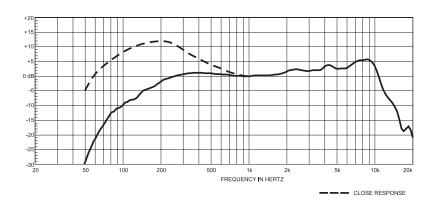
Element:	Dynamic N/DYM® magnet structure
Freq. Response, Close:	45 Hz - 15,000 Hz
Freq. Response, Far:	100 Hz - 15,000 Hz
Polar Pattern:	Cardioid
Sensitivity, Open Circuit Voltage @ 1 kHz:	2.9 mV/pascal
Polarity:	Pin 2 positive, ref. pin 3 with positive pressure on diaphragm
Impedance:	600 ohms balanced (low-z)
Microphone Connector:	3-pin, XLR-type
Finish:	Non-reflecting black
Materials:	Memraflex™ grille screen Warm Grip™ handle
Accessories Included:	Stand Adapter (Black) Soft Zippered "Gig" Bag
Dimensions, Length: Diameter: Shank:	1.6" (41 mm)
Net Weight:	8.7 oz (247 g)
Shipping Weight:	18.6 oz (545 g)
	-

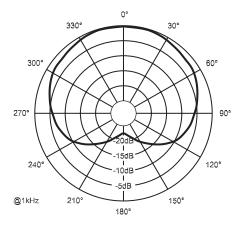


Frequency Response:

Polar Response:

(5 dB per division)
—— 1000 Hz





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.

<u>Usage</u>	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 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.

N/D478 Part Number: 16043312



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