**ENGINEERING DATA**

- Dynamic ribbon microphone
- True hypercardioid characteristic
- Unique four stage integral blast filter
- Robust all metal case
- "Standard" setting specification consistency
- Lockable ON-OFF-switch with M 500 N(C)S

**DESCRIPTION AND APPLICATIONS**

The beyerdynamic model M 500 is a true hypercardioid dynamic ribbon microphone with wide range response and high output, created especially for the most exacting professional use. Emphasizing a major technological breakthrough in ribbon design technique, the M 500 is particularly suited for high level sound applications. The unique beyerdynamic ribbon used in the M 500 measures only 0.85" in length, and weighs only 0.00034 grammes. The transducer mass is, therefore, a mere fraction of that of the speech coil and diaphragm of a moving coil microphone, and this results in a demonstratively better transient response. An improved "no feedback" characteristic is also obtained, and this is particularly important in commercial sound applications.

The M 500 print out shows the rising high frequency response so essential to modern music artists and others, the result of months of research and design innovation. In this respect, the M 500 is unlike the standard beyerdynamic ribbon, which is essentially flat in response. A new and unique four stage integral blast filter permits hand held use with lips almost touching the microphone without danger of popping, hissing and breathing sounds.

The M 500 was primarily developed to cover the special needs of pop vocalists and instrumentalists, and records the true sound of the music in absolute fidelity. It combines the sharp attack of a condenser and the sturdy reliability of a moving coil with the unique presence of a ribbon. The M 500 is designed to withstand the rigors of professional use, will accept sound levels of more than 130 db and is completely unaffected by extremes of atmospheric conditions.

EUGEN BEYER ELEKTROTECHNISCHE FABRIK GMBH & CO. · D-7100 HEILBRONN
This polar pattern and frequency response curve correspond to typical machine run specifications from a standard M 500.

**SPECIFICATIONS**

- **Operating principle:** pressure gradient
- **Frequency response:** 40 - 18,000 Hz.
- **Polar pattern:** hypercardioid
- **Side attenuation at 120° and 1 kHz:** > 20 db
- **Open circuit voltage at 1 kHz:** 1.2 mV/Pa ± 58 dB
- **Output level:** ≤ -57 dbm (0 dBm = 1 mW/Pa)
- **EIA Sensitivity rating:** -150 dbm
- **Nominal impedance:** 200 ohms
- **Load impedance:** > 1,000 ohms
- **Diaphragm (ribbon):** pure aluminum
- **Case:** aluminum
- **Case finish:** matte black anodized
- **Net weight (less cord):** 9.52 ounces (270 grams)
- **Built-in male connector:** Cannon XLR or equivalent (wiring: 1 ground, audio 2+, 3-)

**OPTIONAL ACCESSORIES**

- **Cable:** type MVK N(C), 7.5 m, two conductor, shielded, broadcast type, synthetic rubber-jacketed. Professional three-pin female audio connector on microphone end (mates with Cannon XLR series or equivalent connector), but without connector at the equipment end of the cable, leads white (inphase) and blue.
- **Microphone clamp:** quick release clamp MKV 6
- **Pop screen:** PS 500
- **Gooseneck:** SH 15/400 N(C)
- **Table stand:** ST 300 with MKV 6
- **Floor stands:** ST 201/1, ST 201 A/1, ST 205 A/1 + boom arm SCH 211
- **Adapter:** M25 N(C)-N (plug-in type to adapt male Cannon XLR type connector to a 3-pin DIN connector)
- **High quality transformer to connect low impedance lines to high impedance inputs, or vice versa:** TR/BV 3.450.15.006/C-K/5 - cable transformer, length of cable 5 m, turns ratio 1:15, impedance 200 ohms/45 kohms.
- **Low impedance side - professional three-pin female audio connector, high impedance side - standard 6.35 mm (¼ in.) phone plug TR/BV 3.410.15.006/C-C, plug-in transformer, turns ratio 1:15, impedance 200 ohms/45 kohms, input professional three-pin female audio connector, output three-pin male audio connector (male and female connector to mate with Cannon XLR series or equivalent)
- **For other transformers (e.g., different turns-ratio, DIN connectors) please inquire or see general catalog.**

**FURNISHED ACCESSORIES**

- **Carrying case:** black de luxe leatherette presentation case
- **Swivel adapter:** MKV 8

**ARCHITECTS’ AND ENGINEERS’ SPECIFICATIONS**

The microphone shall be an unidirectional (dynamic) type microphone with a frequency range of 40 — 18,000 Hz. The generating element of this unit shall be a ribbon transducer. The microphone shall have a true hypercardioid polar characteristic with attenuation at 120° of 20 db. The microphone output shall be —57 dbm when 0 dbm = 1 mW/Pa respectively 1.2 mV/Pa. EIA sensitivity rating at 1,000 Hz shall be —150 dbm. Nominal impedance shall be 200 ohms. The case shall be made of aluminum. Case finish shall be matteblack anodized. The overall dimensions shall be: 7.28” (185 mm) in length, diameter of the head 2.22” (56.5 mm) and diameter of the conical shaft 1.34” (34 mm) / 0.95” (24 mm).

The microphone shall be available with a three-pin male audio connector (Cannon XLR or equivalent) version M 500 N(C) S with a lockable ON-OFF-switch.

The beyerdynamic M 500 is specified.

distributed by:

beyerdynamic

EUGEN BEYER ELEKTROTECHNISCHE FABRIK GMBH & CO.
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