

# **Hypercardioid Ribbon Microphone**

# **DESCRIPTION**

The M 500 is a truly extraordinary vocal and instrumental microphone which combines the characteristically warm, lush ribbon sound with the transparent 'detail' of fast. accurate transient reproduction. Optimum side attenuation produces high gain levels before feedback, tight signal isolation and effective separation. The extended frequency response is precisely contoured to enhance vocal 'presence'. The four stage blast filter allows close proximity operation while enabling the M 500's unique ribbon element (only .85 in. long and weighing just 0.00034 grams) to withstand sound pressure levels of up to 130 dB, higher than any other ribbon mic available. Specially designed isolation mounts attenuate handling noise. The model M 500S includes a noise-free lockable On/Off switch.

# **FEATURES**

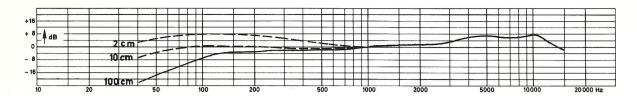
- Highly evolved dynamic ribbon microphone
- True hypercardioid polar characteristic
- Vocal-contoured high frequency emphasis
- Integral four stage pop and blast filter
- Tapered aluminum barrel

## **APPLICATIONS**

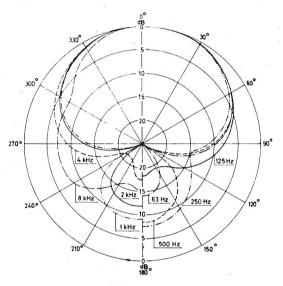
The M 500 is a superb broadcast announcer's microphone and one which is well suited to remote (EFP) and studio reproduction of speech and vocal or instrumental music. It is an excellent vocal microphone for live performance and recording, and is ideal for electric and acoustic guitars, flute, banjo, congas, rack mounted toms and harmonicas. The M 500's rising high end frequency curve and exceedingly fast transient response generate excellent source material for digital recording. It also produces excellent results in meeting room, teleconferencing and paging applications.

EUGEN BEYER ELEKTROTECHNISCHE FABRIK GMBH & CO. · D-7100 HEILBRONN

## FREQUENCY RESPONSE CURVE (± 2.5 dB)



#### **POLAR PATTERN**



This polar pattern and frequency response curve correspond to typical . machine run specifications from a standard M 500.

#### **SPECIFICATIONS**

Transducer type: Operating principle:

Frequency response:

Polar pattern:

Side attenuation at 120° (1 kHz):

Open circuit voltage at 1 kHz:

Output level:

EIA Sensitivity rating:

Nominal output impedance:

Load impedance:

Diaphragm:

Case

Case finish:

200 ohms

≥1000 ohms

Dynamic ribbon

40 - 18,000 Hz

Hypercardioid

>20 dB

1.2 mV/Pa

Pressure gradient

Aluminum

Shaft - matte black anodized;

-57 dBm (0 dBm △ 1 mW/Pa) -150 dBm (0 dBm

△ 1 mW/2 x 10-5 Pa)

Top - chrome mesh

Male connector:

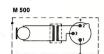
Net weight (less cable):

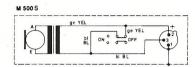
Pure aluminum

Neutrik 3 pin

250 grams (8.5 oz.)

#### WIRING DIAGRAM





Positive pressure produces positive voltage on yellow cable lead (+)

#### **FURNISHED ACCESSORIES**

Carrying case:

Black leatherette foam lined

Mic clip:

MKV 8

### **OPTIONAL ACCESSORIES**

MVK C-C/20 black 20 ft. two-conductor spiral shield synthetic rubber jacketed with black Neutrik 3 pin female XLR connector on mic end and black Neutrik 3 pin male XLR connector on equipment end. MVK C-C also available in 25 and 50 ft. lengths and with 1/4" two-conductor plug at

equipment end.

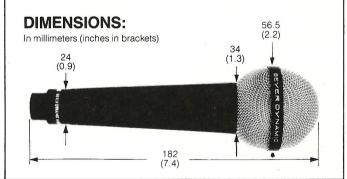
Mic clip:

MKV 6 quick release

Popscreen:

PS 500 polyurethane foam, available in black,

red, blue, yellow and green



#### **ARCHITECTS' AND ENGINEERS' SPECIFICATIONS**

The microphone shall be a unidirectional dynamic type with a frequency range of 40 - 18,000 Hz. The generating element of this unit shall be a ribbon transducer. The unit shall have a true hypercardioid polar characteristic. Attenuation at 120° shall exceed 20 dB. The microphone output shall be –57 dBm when 0 dBm  $\triangle$  1 mW/Pa respectively 1.2 mV/Pa. EIA sensitivity at 1,000 Hz shall be –150 dBm. Electrical impedance shall be 200 ohms. The case shall be made of aluminum with a matte black anodized finish and a chrome mesh top. The dimensions shall be: 7.4 in. (182 mm) overall length, head diameter of 2.2 in. (56.5 mm) and shaft diameter of 1.3/0.9 in. (34/24 mm) The microphone shall be available with a Neutrik 3 pin male connector or equivalent. The beyerdynamic model M 500 is specified. The model M 500S shall have a lockable noise-free On/Off magnetic reed switch.

Subject to change without notice.

beyerdynamic, Inc. 5-05 Burns Avenue, Hicksville, NY 11801, USA Tel.: (516) 935-8000, Fax (516) 935-8018

beyerdynamic (GB) Ltd. Cliffe Industrial Estate, Lewes, Sussex BN8 6JL, England Tel.: (273) 47 94 11, Fax (273) 47 18 25