

Hypercardioid Double Ribbon Microphone

DESCRIPTION

The M 160's low-mass, low-inertia ribbons reproduce transients with complete accuracy to create a crisply detailed sound and a transparent acoustic 'image'. The true hypercardioid pattern provides 25 dB attenuation at 110°, suppressing lateral interference and allowing high gain levels without feedback.

The accurate, uncolored sound of the M 160 is suited to a wide variety of demanding recording and sound reinforcement applications. Paired with the bidirectional M 130, it creates an authentic stereo image in the M-S (Mid-Side) miking technique. The compact metal casing has a matte black chromium plating with extremely low reflectivity, an important consideration in television and film applications.

The M 160's breakthrough design employs two aluminum ribbons in a vertical array only .0002 inches apart. Each ribbon is less than one twelve-thousandth of an inch thick, and much shorter than conventional ribbons. A special forming process makes them highly resistant to overload or mechanical shock.

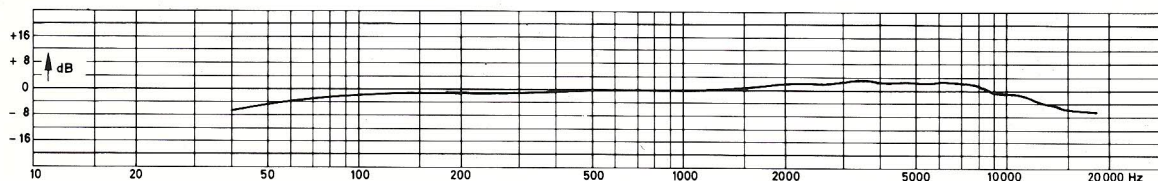
FEATURES

- **Unique double ribbon transducer**
- **True hypercardioid polar characteristic**
- **Extended frequency response**
- **Compact design**

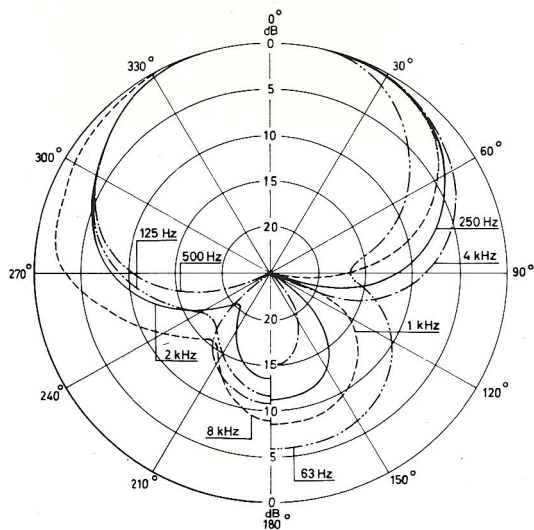
APPLICATIONS

The M 160 produces excellent results in both remote and studio recordings of vocal or instrumental source material. In the recording studio, it is especially recommended for acoustic guitar, banjo, snare drum, piano, flute and violin. Its full, natural sound and accurate transient response are perfectly suited to the stringent requirements of contemporary audiophile techniques such as digital recording. With its companion M 130, the M 160 is ideal for demanding broadcast applications where the Mid-Side technique is used to create a true stereo image.

FREQUENCY RESPONSE CURVE (± 2.5 dB)



POLAR PATTERN

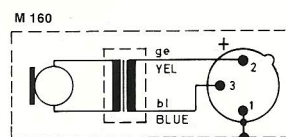


This polar pattern and frequency response curve correspond to typical machine run specifications from a standard M 160.

SPECIFICATIONS

Transducer type:	Dual dynamic ribbon
Operating principle:	Pressure gradient
Frequency response:	40 - 18,000 Hz
Polar pattern:	Hypercardioid
Side attenuation at 110° (1 kHz):	> 25 dB
Open circuit voltage at 1 kHz:	1.0 mV/Pa
Output level:	-59 dBm (0 dBm Δ 1 mW/Pa)
EIA Sensitivity rating:	-152 dBm (0 dBm Δ 1 mW/2 x 10 ⁻⁵ Pa)
Nominal output impedance:	200 ohms
Load impedance:	\geq 1000 ohms
Diaphragm:	Pure aluminum
Case:	Brass
Case finish:	Shaft - matte black chromium plating. Top - chrome mesh
Male connector:	Neutrik 3 pin
Net weight (less cable):	156 grams (5.5 oz.)

WIRING DIAGRAM



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

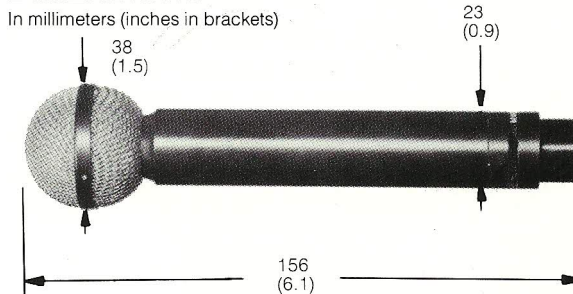
FURNISHED ACCESSORIES

Carrying case:	Black leatherette foam lined
Mic clip:	MKV 8

OPTIONAL ACCESSORIES

Cable:	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
Windscreen:	WS 260 polyurethane foam

DIMENSIONS



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 the unit shall be a special double ribbon transducer. The unit shall have a true hypercardioid polar characteristic. Attenuation at 110° shall exceed 25 dB. The microphone output shall be -59 dBm when 0 dBm Δ 1 mW/Pa respectively 1 mV/Pa. EIA sensitivity at 1,000 Hz shall be -152 dBm. Electrical impedance shall be 200 ohms. The case shall be made of brass, finished in matte black chromium plating, with a chrome mesh top. The dimensions shall be: 6.1 in. (156 mm) overall length, head diameter of 1.5 in. (38 mm) and shaft diameter of 0.9 in. (23 mm). The microphone shall be available with a Neutrik 3 pin male connector or equivalent. The Beyer Dynamic model M 160 is specified.