Hypercardioid Moving Coil Microphone

DESCRIPTION
The M 600's durable moving coil design was developed after extensive research in close cooperation with leading musicians and vocalists worldwide. The patented Hostaphan® diaphragm responds to transients with speed and accuracy, creating a highly detailed, transparent sound without excessive sibilance. The M 600's hypercardioid pickup pattern allows high gain levels before feedback with 24 dB attenuation at 120°. The powerful, richly detailed sound of the M 600 enhances vocal 'presence' with a precisely contoured high frequency rise. A unique three-position equalizer offers -8 dB/ -12 dB/-16 dB attenuation at 50 Hz, enabling the user to filter out unwanted low frequency noise and stage rumble. The M 600 has an elastically suspended transducer system which eliminates handling noise, and an integral pop filter to reduce explosive breath sounds. The model M 600S includes a noise-free lockable On/Off switch.

FEATURES
- Moving coil design with ultrafast Hostaphan® diaphragm
- True hypercardioid polar pattern
- Extended frequency range with "presence" boost
- Three-position EQ switch tailors low-frequency response to varying conditions
- Integral -20 dB humbucking coil
- Tapered aluminum barrel

APPLICATIONS
The M 600 is designed for a wide variety of top-level vocal and instrumental sound reinforcement and recording situations. It is also excellent for public address and teleconferencing 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 600.

SPECIFICATIONS

Transducer type: Dynamic moving coil
Operating principle: Pressure gradient
Frequency response: 40 - 16,000 Hz
Polar pattern: Hypercardioid
Side attenuation at 120° (1 kHz): > 24 dB
Open circuit voltage at 1 kHz: 1.4 mV/Pa
Output level: -57 dBm (0 dBm ± 1 mW/Pa)
EIA Sensitivity rating: -149 dBm (0 dBm ± 1 mW/2x10⁻⁵ Pa)
Magnetic Field Suppression: > 20 dB @ 50 Hz
Nominal output impedance: 250 ohms
Load impedance: ≥1000 ohms
Bass attenuation: Stepped -6/-12/-16 dB @ 50 Hz
Diaphragm: Hostaphan®
Case: Aluminum
Case finish: Shaft - black matte anodized; Top - chrome mesh
Male connector: Neutrik 3 pin
Net weight (less cable): 245 grams (8.6 oz.)

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be a moving coil dynamic type with a frequency range of 40 - 16,000 Hz. The unit shall have a true hypercardioid polar characteristic. Attenuation at 120° shall exceed 24 dB. The microphone output shall be -57 dBm when 0 dBm ± 1 mW/Pa respectively 1.4 mV/Pa. EIA sensitivity at 1,000 Hz shall be -149 dBm. The microphone shall have an integral humbucking coil to reduce magnetic hum susceptibility by better than 20 dB at 50 Hz. The microphone shall have three-position bass attenuator switch to effect -8 dB/-12 dB/-16 dB frequency contouring at 50 Hz. Electrical impedance shall be 250 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. (190 mm) overall length, head diameter of 2.1 in. (53.5 mm) and shaft diameter of 0.95 in. (23.85 mm). The microphone shall be available with a Neutrik 3 pin male connector or equivalent. The beyerdynamic model M 600 is specified. The model M 600S shall have a lockable noise-free On/Off magnetic reed switch.