

Product Information

KMS 105

Vocalist Microphone





Designed with superlative vocal reproduction in mind, the KMS 105 brings Neumann quality to the demanding sound reinforcement environment.

With its supercardioid polar pattern, low self noise and uncolored off-axis pickup, the KMS 105 complements in-ear monitor systems.

By employing a unique 4-layer acoustic filter, the KMS 105 minimizes popping and wind noise, and with special mechanical and electrical filters, handling noise is virtually eliminated. Because of the superior resolution and linear frequency response, it is very easy for the artist using the KMS 105 to identify whether he or she is "on mic".

Acoustic features

When compared to other handheld vocal microphones, the KMS 105 offers a superior resolution of the voice, with extended frequency response and accurate transient detail. Sibilance problems common to other handheld condenser mics are eliminated.

No foam is used in the basket, thus eliminating any "clouding" or "muffling" of the sound.

Also, by using a DC-polarized studio condenser capsule, all the nuances of the voice come through with subtlety, power and focus.

The K 105 capsule was developed from the K 50, found in the KMS 150, KM 150 and KM 185 microphones. The K 105 features a supercardioid pattern, achieved by specially modifying the response of the K 50 pressure gradient transducer.

The frequency response characteristic is developed in the acoustic realm, allowing for accurate representation of transient details found in music and speech, and thus transmitting a very "open" and detailed capture of the human voice.

Due to the tight supercardioid polar pattern and the coloration-free off axis response, a very high level of gain before feedback is achieved.

This polar pattern offers the highest degree of isolation while still allowing for a generous "sweet spot" in front of the microphone.

Delivery Range

KMS 105 Microphone
SG 105 Stand clamp
Padded nylon bag

Catalog No.

KMS 105 ni 08454
KMS 105 mt..... blk 08455

Selection of Accessories

Battery supply, BS 48 i blk 06494
Battery supply, BS 48 i-2 blk 06496
Power supply, N 48 i-2 (230 V) blk 06500
Power supply, N 48 i-2 (117 V) blk 06502

Gooseneck, SMK 8 i blk 06181
Table stand, MF 3 blk 07321
Windscreen, WSS 100 blk 07352

Microphone cable, IC 3 mt..... blk 06543
Adapter cable, AC 22 blk 06598
Adapter cable, AC 25 blk 06600
Adapter cable, AC 27 blk 06602

Stand clamp, SG 105 blk 08460
(included in the supply schedule)

A complete survey and detailed descriptions of all accessories are contained in the accessories catalog.

Meaning of color codes:
blk = black, ni = nickel

Features

- Neumann sound on stage
- Excellent transparency for vocals/speech
- Without off-axis coloration
- Transformerless output
- Supercardioid polar pattern with excellent feedback rejection
- Effective pop shielding without any side effects
- Set includes stand clamp

Application Hints

- Vocals and speech on stage
- Announcer's mic for broadcasting/dubbing
- Especially suited for in-ear-monitoring
- Especially suitable with front-of-stage monitor systems
- For feedback-prone environment

These are just some of the most common applications. We recommend additional experimentation to gain maximum use from this microphone.

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Electrical features

The dynamic range of the KMS 105 is 132 dB, allowing reproduction of the artist's full expression, without restraint. The maximum SPL is 150 dB and with a low self noise of 18 dB-A, a greater gain can be used without risk of adding noise to the mix.

This way, the artist is able to use the microphone at a greater distance therefore maintaining a wide range of creative freedom during the performance.

Because of the superior resolution and linear high frequency response, it is very easy for the artist using in-ear monitors to identify whether or not he or she is "on mic" with the KMS 105. And by employing a transformerless output circuit, this microphone can incorporate long cable runs with no loss of signal quality or high-frequency response.

The microphone basket

Most of the available vocalist microphones rely on the attenuating effects of foam layers inside the basket. Although this is certainly a cost-effective procedure, the detrimental effects of this foam layer can be shown quite easily. Treble frequencies are attenuated, and furthermore the polar pattern can be deformed.

These drawbacks can be eliminated by selecting open mesh constructions. With careful dimensioning and selection of different mesh sizes, excellent pop and wind attenuation can be delivered, as is well known from the standard studio-use pop screens PS 10 and PS 20, made of two layers of spaced fabric.

In the KMS 105 a combination of four wire meshes with different mesh sizes is used. The chosen combination yields a very constant polar pattern, while maintaining the capsule's acoustic frontal frequency response.

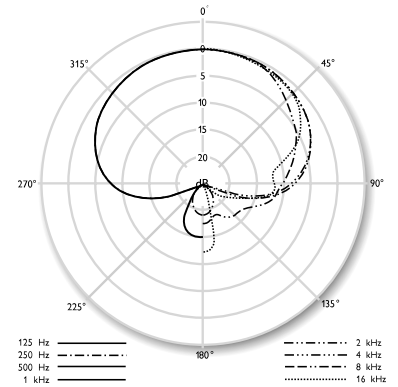
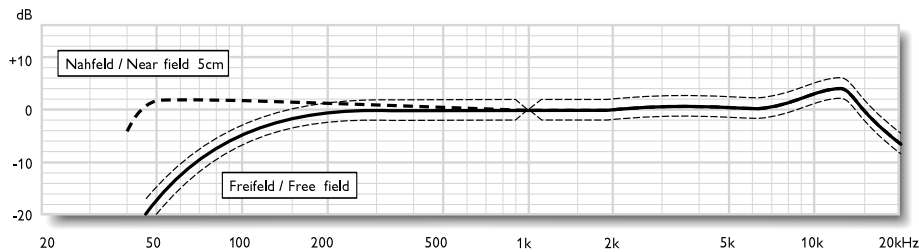
Naturally, the outer microphone basket is hardened steel, due to the required ruggedness for on-stage use.





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Technical Data

Acoustical operating principle Pressure gradient transducer
 Directional pattern supercardioid
 Frequency range 20 Hz...20 kHz
 Sensitivity at 1 kHz into 1 kohm 4.5 mV/Pa
 Rated impedance 50 ohms
 Rated load impedance 1000 ohms
 Equivalent SPL CCIR 468-3 28 dB
 Equivalent SPL DIN/IEC 651 18 dB-A
 S/N ratio CCIR 468-3 66 dB
 S/N ratio DIN/IEC 651 76 dB

Maximum SPL for THD 0.5% 150 dB
 Maximum output voltage 12 dBu
 Dynamic range of the mic. amplifier DIN/IEC 651 132 dB
 Supply voltage 48 V \pm 4 V
 Current consumption 3.5 mA
 Matching connector XLR 3F
 Weight approx. 300 g
 Diameter 48 mm
 Length 180 mm

Selection of Accessories

