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TLM 67

Product Information



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The design of the microphone is a registered design of the Georg Neumann GmbH in certain countries.

In the world of studio microphones, the numbers “47”, “67” and “87” have associations that inspire enthusiasm among professionals in the field. It is of course no coincidence that the name of the new TLM 67 contains the number “67”. In many respects, the TLM 67 is based on the “workhorse” of the 1960s, the legendary U 67. Like the U 67, the TLM 67 incorporates the K 67 capsule. In addition, the special new circuit design closely reproduces the sound characteristics of the classic U 67, without the use of tubes. Similar Neumann circuit technology has already proved very successful in the TLM 49.

The TLM 67 is extremely versatile. Its three switchable directional characteristics (omnidirectional, cardioid and figure-8), selectable 10 dB pre-attenuation and high-pass filter permit detailed adjustments to be made, depending upon the specific recording situation.

Exterior design

The TLM 67 is a large-diaphragm condenser microphone in the classic Neumann style, with a unique dual-color design. The stylish pearl-gray of the microphone body combined with the classic Neumann nickel lends the microphone a touch of distinctive individuality.

The legendary, frequently imitated design of the Neumann U 67 was the first to be developed by Neumann employees in collaboration with the famous German designer, Wilhelm Braun-Feldweg. The design of the TLM 67 represents a contemporary development of that of the U 67, transferring its positive impact to the present era. The enhanced exterior design thus links past and future microphone design trends.

On the occasion of its 80th anniversary, the Neumann company is honoring its founder, Georg Neumann, with a three-dimensional metal emblem on the front of the TLM 67. The distinctive Neumann attraction is conveyed in every detail of the microphone.

Applications

Due to its extensive control features, the TLM 67 is suitable for a wide range of applications. In addition to its primary role as a vocal microphone for all types of music and spoken voice, in orchestral recordings the TLM 67 can be used as a main microphone and as a spot microphone for individual instruments.

Acoustic features

The microphone is addressed from the side on which the Neumann logo is located.

A large wire mesh grille encloses the elastically mounted double diaphragm capsule. The directional characteristics omnidirectional, cardioid or figure-8 can be selected via a switch below the grille. The selected setting is indicated by a symbol shown in a window above the switch.

Electrical features

The letters “TLM” stand for “transformerless microphone”. In the TLM 67, an electronic circuit is used rather than a conventional output transformer. Like a transformer, the circuit ensures good common mode rejection, effectively suppressing interference signals that affect the balanced modulation line. The microphone can operate at sound pressure levels of up to 105 dB without distortion, and has a dynamic range of 94 dB (A-weighted), without the use of the pre-attenuation switch.

Filter and pre-attenuation

The pre-attenuation switch on the back of the microphone can be used to reduce transmission levels by approx. 10 dB. It should be used only when there is a risk of overloading following devices due to very high sound pressure levels. Use of the switch does not increase the dynamic range of the microphone, but rather shifts it by 10 dB, to higher sound pressure levels. The other switch on the back of the microphone can be used to change the cutoff frequency of the built-in high-pass filter, so as to suppress the effects of impact sound and wind noise, or to compensate for the proximity effect.

Operational reliability

Elastic mounting of the capsule supplies protection from the transmission of structure-borne noise. If required, the EA 87 elastic suspension and WS 87 windscreens are available as accessories, for further suppression of structure-borne and wind noise. The PS 15 or PS 20 a popscreen can be used if the microphone is to be addressed at close range.

Features

- Sound characteristics based on the legendary U 67
- Three switchable directional characteristics (omnidirectional, cardioid and figure-8)
- Switchable high-pass filter and pre-attenuation
- Transformerless circuit technology
- New dual-color exterior design

Application Hints*

- Extremely versatile
- Vocal microphone (soloists and background choir)
- Broadcasting, dubbing and voiceovers
- Overhead microphone
- Spot microphone, and suitable e.g. for strings, especially cello and double bass, as well as piano

Delivery Range

TLM 67 microphone, Case

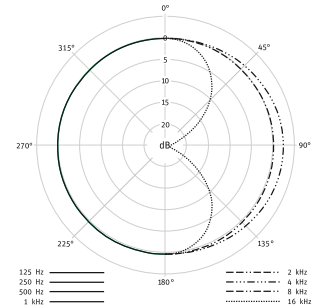
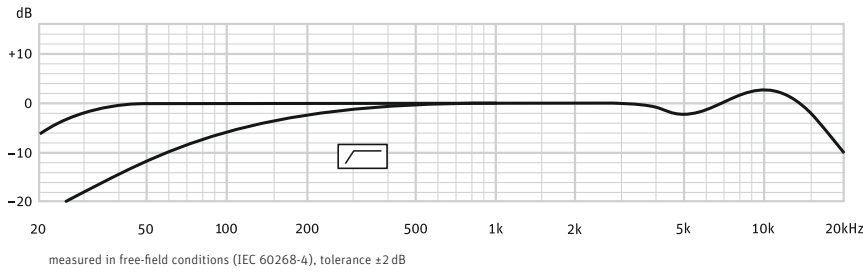
Catalog No.

TLM 67 pgr..... 008605

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



Omni



Cardioid

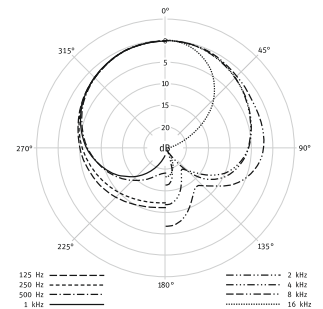
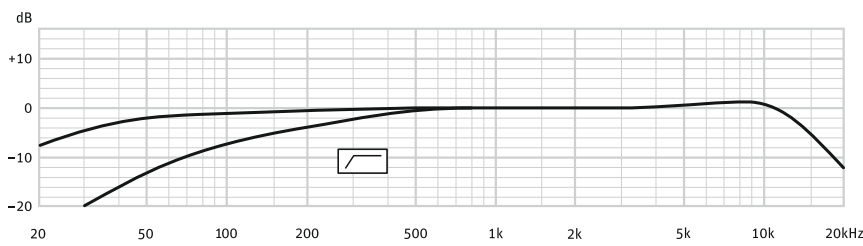
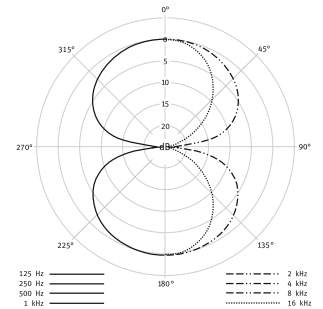
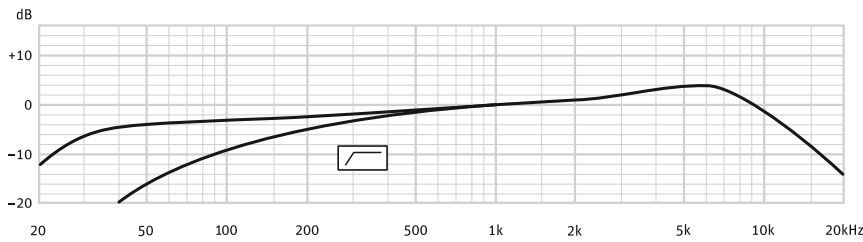


Figure-8



Technical Data

Acoustical operating principle Pressure gradient transducer
 Directional pattern Omni/cardioid/figure-8
 Frequency range 20 Hz...20 kHz
 Sensitivity at 1 kHz into 1 kohm 10/18/9 mV/Pa
 Rated impedance 50 ohms
 Rated load impedance 1 kohms
 Signal-to-noise ratio, CCIR¹⁾ (rel. 94 dB SPL) 65/70/64 dB
 Signal-to-noise ratio, A-weighted¹⁾ (rel. 94 dB SPL) 78/83/77 dB
 Equivalent noise level, CCIR¹⁾ 29/24/30 dB
 Equivalent noise level, A-weighted¹⁾ 16/11/17 dB-A

Maximum SPL (tube characteristic)²⁾:

for THD < 0.5 % 110/105/111 dB
 for THD < 5 % 130/125/131 dB
 Maximum output voltage -1 dBu
 Dynamic range of the microphone amplifier:
 (A-weighted) for < 0.5% THD (for < 5% THD) 94 (104) dB
 Power supply P48
 Matching connector microphone XLR3F
 Weight 490 g
 Diameter/Length 56/200 mm

Selection of Accessories

Elastic suspension, EA 87 ni 007297
 Auditorium hanger, MNV 87 ni 006804
 Stand mount, SG 87 blk 008619
 Windscreen, WS 87 blk 006753
 Popscreen, PS 15 blk 008472
 Popscreen, PS 20 a blk 008488
 Battery supply, BS 48 i blk 006494
 Battery supply, BS 48 i-2 blk 006496
 Power supply, N 248 EU blk 008537
 Power supply, N 248 US blk 008538
 Power supply, N 248 UK blk 008539
 Microphone cable, IC 3 mt blk 006543
 Microphone cable, IC 4 ni 006547
 Microphone cable, IC 4 mt blk 006557

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

Meaning of color codes:

pgr = pearl gray, blk = black, ni = nickel, gry = gray

¹⁾ according to IEC 60268-1; CCIR-weighting according to CCIR 468-3, quasi peak; A-weighting according to IEC 61672-1, RMS ²⁾ measured as equivalent el. input signal