

**Discover.**

**The freedom of sound – the new TLM 107.**



## THE FREEDOM OF SOUND – THE NEW TLM 107

**Multi-faceted versatility, no-compromise sound and innovative operation:** With five directional characteristics and a novel operating concept, this standard-setting large-diaphragm microphone provides sound without any coloration. Featuring equally impressive level handling and low self-noise, it captures everything from the softest whisper to thundering drums. For studio, broadcasting and demanding home recording applications.

Classic proportions combined with attractive styling and fresh ideas – the TLM 107 perfectly embodies the Neumann philosophy: Innovation based on tradition. Far from evoking vintage or retro nostalgia, the standard-setting TLM 107 represents an impressive, modern studio microphone. Its extensive performance spectrum and high-precision reproduction, very close to the original, make the TLM 107 universally applicable, opening up the widest freedom in mixing and post-production.

### Neumann Engineering

The newly developed sound transducer, which was designed especially for this microphone, is impressive with its outstanding impulse fidelity. The great consistency of the five polar patterns, omnidirectional, cardioid and figure-8, with the intermediate patterns wide-angle cardioid and hypercardioid, is also unusual for a large-diaphragm capsule. The TLM 107 provides optimal sound not only for the cardioid setting; it also ensures maximum precision over the entire frequency range for all of the other directional characteristics. The sound always remains balanced, with an almost linear reproduction up to 8 kHz, and a slight boost in the highest frequencies that lends presence and freshness to the voice. Here particular attention has been paid to the natural reproduction of speech sounds, especially the critical “s” sound. The grille is acoustically optimized for low sensitivity to pop sounds. In addition, the sound transducer is edge-terminated,



### ▶ Features

- Multipattern large diaphragm microphone with 5 polar patterns (omni, wide cardioid, cardioid, hypercardioid, figure-eight)
- Navigation switch with LED illuminated display for polar pattern, PAD and low cut
- Sound characteristics: transparent, natural reproduction of human voice, outstanding transient response
- Balanced sound in all 5 polar pattern settings

### ▶ Application Hints

- Vocals and speech with optimized handling of sibilance
- Main microphone in orchestra recordings or spot microphone particularly suggested for string, woodwind and brass instruments
- Recording of extreme SPLs (drum and percussion, guitar amp etc.)
- Broadcast (radio drama, ADR), film & game sound production, professional recording studios, home recording

Technical Data			
Acoustical operating	Pressure gradient transducer	Maximum SPL for THD 0.5% <sup>2)</sup>	141 dB
Directional pattern	Omnidirectional, wide angle cardioid, cardioid, hypercardioid, figure-8	with preattenuation –6 dB	147 dB
Frequency range	20 Hz...20 kHz	with preattenuation –12 dB	153 dB
Sensitivity at 1 kHz into 1 kohm	11 mV/Pa	Max. output voltage for THD > 0.5 %	10 dBu
Rated impedance	50 ohms	Supply voltage (P48, IEC 61938)	48 V ± 4 V
Rated load impedance	1 kohms	Current consumption (P48, IEC 61938)	3,2 mA
Equivalent noise level, CCIR <sup>1)</sup>	22 dB	Matching connector	XLR3F
Equivalent noise level, A-weighted <sup>1)</sup>	10 dB-A	Weight approx.	445 g
Signal-to-noise ratio, CCIR <sup>1)</sup> (rel. 94 dB SPL)	72 dB	Diameter	64 mm
Signal-to-noise ratio, A-weighted <sup>1)</sup> (rel. 94 dB SPL)	84 dB	Length	145 mm

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

## TLM 107 – LARGE DIAPHRAGM MICROPHONE

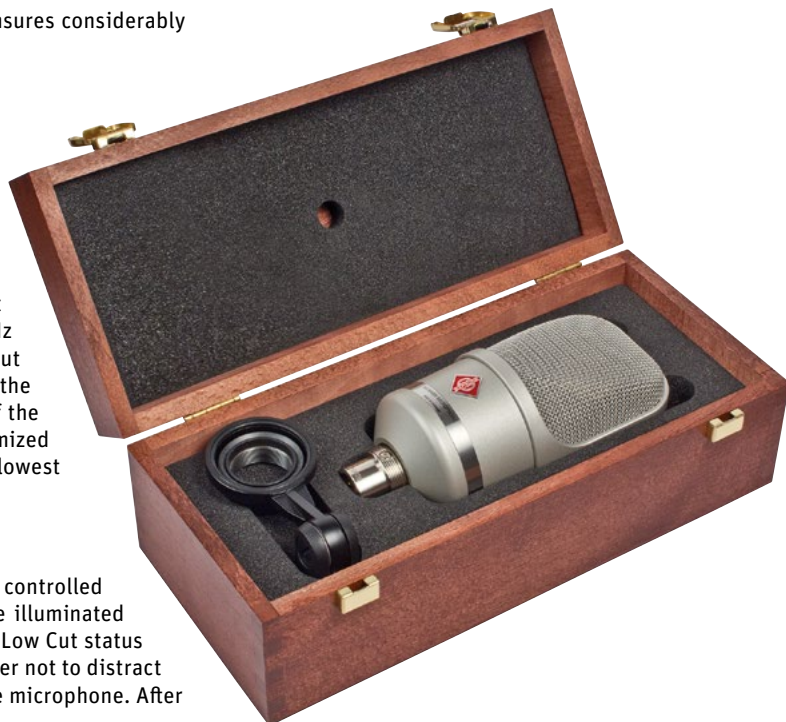
with both diaphragms at ground voltage. Specifically, this ensures considerably reduced sensitivity to dust and humidity.

### No-Compromise Sound Design

Transformerless circuitry permits a high degree of linearity and a large dynamic range. The self-noise of only 10 dB-A is practically inaudible, while at the same time, the TLM 107 features high level handling. The maximum sound pressure level of 141 dB SPL can be increased to 153 dB SPL via pre-attenuation (Pad). This enables the TLM 107 to transmit the sound of even the loudest instruments without distortion. The Low Cut settings of Linear, 40 Hz, and 100 Hz are precisely adapted to practical recording situations. Without side effects, the 40 Hz setting cuts interference noise below the range of fundamental tones (where 41 Hz is the frequency of the double bass open E string), while the 100 Hz setting is optimized for speech and vocals (where 100 Hz corresponds to the lowest notes of a baritone).

### Innovative Operating Concept

For the first time, all of the microphone switch functions are controlled intuitively via a navigation switch. A visual highlight is the illuminated pattern display in the stainless steel ring, while the Pad and Low Cut status is displayed by LEDs to the left and right of the switch. In order not to distract singers, the switch and display are located on the back of the microphone. After 15 seconds, the displays are turned off automatically.



TLM 107 in nickel.



TLM 107 + EA 4 in black.



TLM 107 + EA 4 in nickel.



### ► Delivery Range

TLM 107 (bk):

- TLM 107 (bk) Microphone
- SG 2 Stand mount swivel

TLM 107 (bk) Studio Set:

- TLM 107 (bk) Microphone
- EA 4 Elastic Suspension

### ► Order Information

TLM 107 ..... ni ..... 008666  
 TLM 107 bk ..... blk ..... 008667  
 TLM 107 Studio Set ..... ni ..... 008673  
 TLM 107 bk Studio Set ..... blk ..... 008674

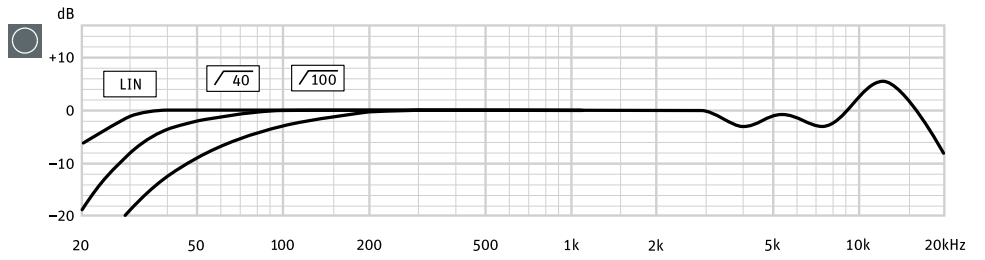
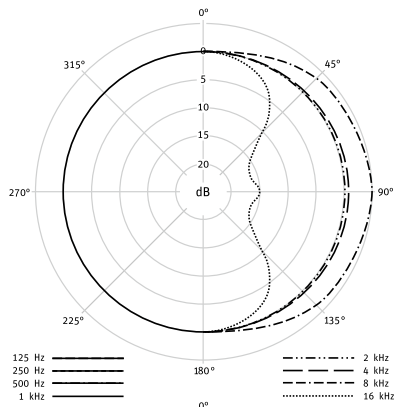
### ► Selection of Accessories

Elastic suspension, EA 4 ..... ni ..... 008641  
 Elastic suspension, EA 4 bk ..... blk ..... 008642  
 Auditorium hanger, MNV 87 ..... ni ..... 006804  
 Auditorium hanger, MNV 87 mt ..... blk ..... 006806  
 Double Mount, DS 120 ..... blk ..... 007343  
 Stand mount, SG 2 ..... blk ..... 008636  
 Floor Stand, MF 4 ..... blk ..... 007337  
 Floor Stand, MF 5 ..... gry ..... 008489  
 Stand extension, STV 4 ..... blk ..... 006190  
 Stand extension, STV 20 ..... blk ..... 006187  
 Stand extension, STV 40 ..... blk ..... 006188  
 Stand extension, STV 60 ..... blk ..... 006189  
 Popscreen, PS 15 ..... blk ..... 008472  
 Popscreen, PS 20 a ..... blk ..... 008488

Windscreen, WS 47 ..... blk ..... 006826  
 Battery supply, BS 48 i ..... blk ..... 006494  
 Battery supply, BS 48 i-2 ..... blk ..... 006496  
 Power supply, N 248<sup>\*)</sup> ..... blk ..... 008537  
 Microphone cable, IC 3 mt ..... blk ..... 006543  
 Microphone cable, IC 4 ..... ni ..... 006547  
 Microphone cable, IC 4 mt ..... blk ..... 006557

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

<sup>\*)</sup> Only phantom power supply, no remote control for directional pattern



measured in free-field conditions (IEC 60268-4), tolerance  $\pm 2$  dB

