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▶ THE MICROPHONE COMPANY

Solution-D

TLM 103 D



www.neumann.com

First Take – Best Take.

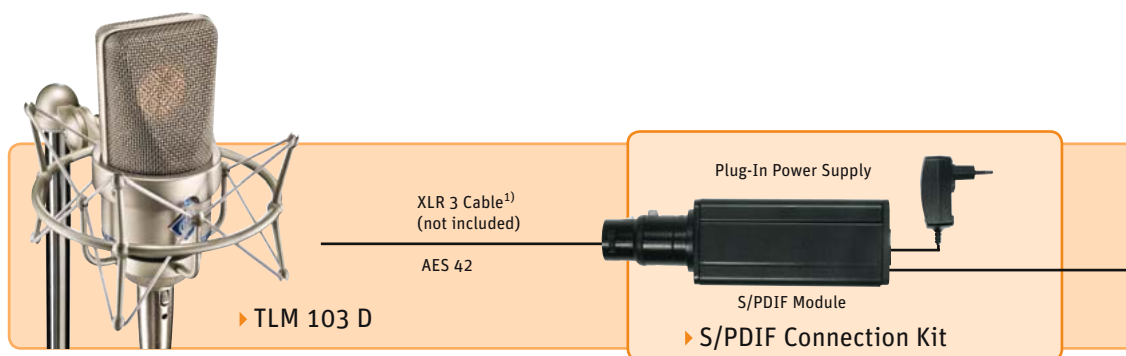
English

True Neumann sound in the digital world

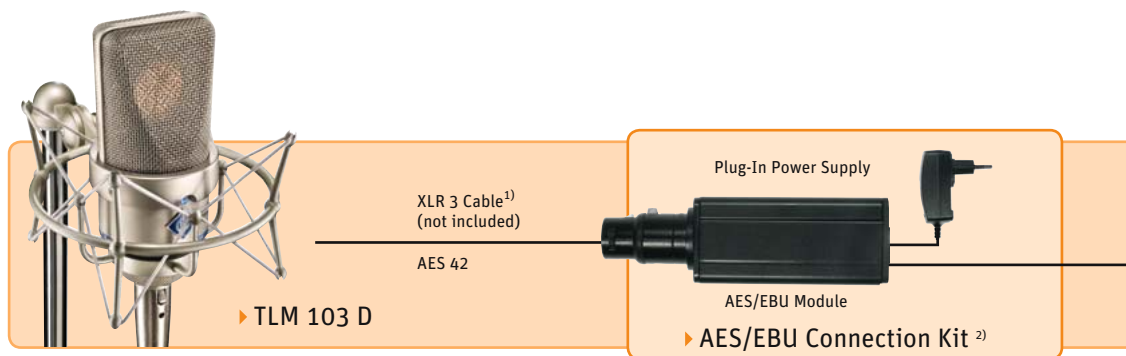


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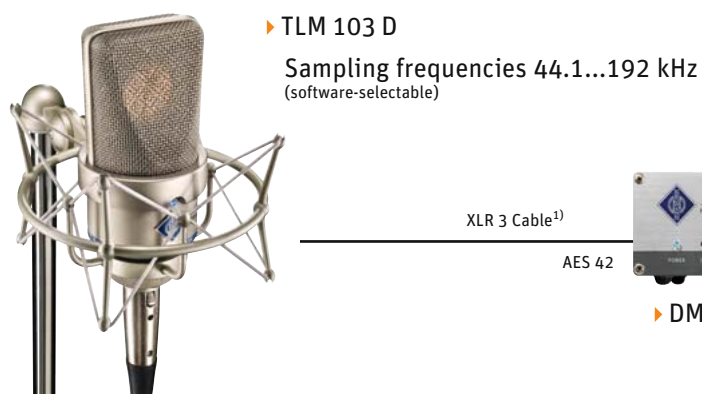
►► THE MICROPHONE COMPANY



► TLM 103 D Starter Set - S/PDIF (44.1 or 48 kHz)³⁾



► TLM 103 D Starter Set - AES/EBU (44.1 or 48 kHz)³⁾



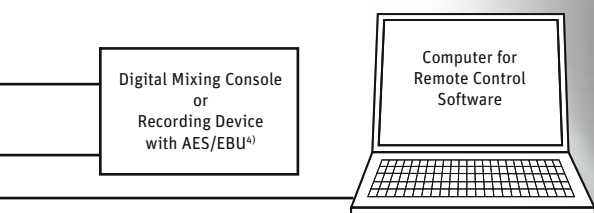
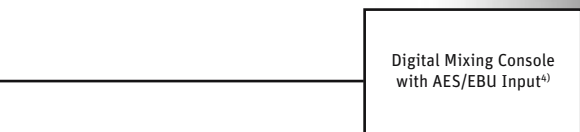
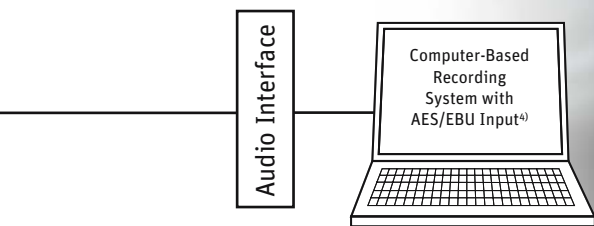
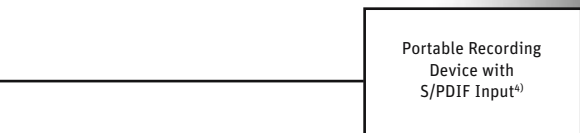
¹⁾ special cable recommended for digital use

²⁾ not necessary when using DMI-2

³⁾ with the DMI-2 the frequency can be set to 44.1, 48, 88.2, 96, 176.4 or 192 kHz

TLM 103 D

Combinations



All too frequently, the naturalness and spontaneity of a recording suffer due to technical considerations. On the first take, it often happens that channel gain level settings are not yet optimal, or that it takes time to arrive at the desired sound for the recording.

The situation is different when Neumann digital microphones are involved! The integrated, extremely fast peak limiter guarantees optimal recording levels at all times. Likewise, the Neumann A/D converter built into the microphone makes tedious experimentation with external converters and pre-amps unnecessary. The Neumann sound is stored directly on your hard disk, with optimal quality. You can count on it – and can focus all your energy on the essentials.

The TLM 103 D, available immediately, is the digital version of a classic mic for home recording and project studios. In future, no more takes will be lost – from the first second, you will be ready to record.



TRUE NEUMANN SOUND:

The legendary Neumann sound in the digital realm. Pure Neumann capsule sound.



TRUE CONVERSION:

The guarantee of having one of the best A/D converters available.



TRUE TIME SAVINGS:

Reduced time requirements and costs, particularly due to faster pre and post production processing.



TRUE ECONOMY:

Lower investment costs, since separate A/D converters and preamps are no longer needed. This also means space and weight savings.



TRUE TO THE ORIGINAL:

The satisfaction of recording the uncolored original, with no "bottlenecks" between the capsule and the recording system.



TRUE HANDLING SAFETY:

Anti-clipping processing ensures handling safety, and reduces stress.

⁴⁾ these are only examples

Application Hints

- A universal cardioid mic
- Vocalist recording
- Announcer's mic for broadcasting/voice over
- Due to minimal self-noise: on-air mic for radio/broadcast, very low amplitude signals, radio drama, sampling, foley/sound effects
- Home recording and project studios
- Spot mic for wind instruments, strings, percussion, guitar amps, drum overhead

Order Information

Delivery Range

TLM 103 D Microphone:

TLM 103 D (mt) Microphone, SG 1 Stand mount in wooden box

Starter Set TLM 103 D:

TLM 103 D Microphone

EA 1 Elastic suspension

Connection Kit (S/PDIF or AES/EBU)

Catalog No.

TLM 103 D ni 008603
TLM 103 D mt..... blk 008604

Please indicate preset frequencies with order.

Starter Set S/PDIF (44.1 kHz)..... ni 008617
Starter Set S/PDIF (48 kHz)..... ni 008618
Starter Set AES/EBU (44.1 kHz)..... ni 008615
Starter Set AES/EBU (48 kHz)..... ni 008616

Selection of Accessories

Connection Kit AES/EBU..... 008584
Connection Kit S/PDIF 008585
Interface, DMI-2 EU 008561
Interface, DMI-2 UK 008587
Interface, DMI-2 US 008588
Elastic suspension, EA 1..... ni 008449
Elastic suspension, EA 1 mt..... blk 008450
Auditorium hanger, MNV 87 ni 006804
Auditorium hanger, MNV 87 mt..... blk 006806
Windscreen, WS 87..... blk 006753
Popscreen, PS 15..... blk 008472
Popscreen, PS 20 a..... blk 008488
Microphone cable, IC 3 mt..... blk 006543

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

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

Technical Data

General Specifications

Interface: AES 42

Remote controlled¹⁾ functions:

- Low-cut: Off, 40, 80, 160 Hz
- Pre-attenuation: 0, -6, -12, -18 dB
- Gain: 0...63 dB in 1 dB steps, clickless
- Testsignal: 1 kHz, pink noise, white noise
- Parametric compressor/limiter (incl. de-esser function)
- Independent peak limiter avoiding any clipping
- Switch functions: soft muting, phase reverse, signal lights
- Signal lights: blue LED

A/D conversion: Neumann process (patented),
28-bit internal word length

Digital signal processing: Fixed-point,
variable internal word length 28 bits to 60 bits

Synchronization:

AES 42-Mode 2, Mode 1 (asynchronous),

Asynchronous operation (free-running),

basic frequency accuracy: ± 25 ppm

Synchronous operation, pull-in range: Min. ± 100 ppm

Power supply: Phantom power complying with AES 42

Supply voltage range: +7 V to +10.5 V

Output: XLR 3M, 24 bits as per AES/EBU (AES 3)

Specifications

Acoustic transducer: Pressure gradient transducer

Directional characteristic: Cardioid

Frequency response: 20 Hz to 20 kHz

Free-field sensitivity²⁾: -39 dBFS

Equivalent noise level, CCIR⁴⁾: 17.5 dB

Equivalent noise level, A-weighted⁴⁾: 7 dB-A

Signal-to-noise ratio³⁾, CCIR⁴⁾: 76.5 dB

Signal-to-noise ratio³⁾, A-weighted⁴⁾: 87 dB

Maximum SPL at 0 dBFS: 134 dB SPL

Dynamic range, A-weighted⁴⁾: 127 dB

Sampling rates: 44.1, 48, 88.2, 96, 176.4, 192 kHz

Weight: approx. 460 g, Diameter: 60 mm, Length: 132 mm

Connection Kit S/PDIF (AES/EBU) Specifications

Connector: input XLR 3F, output Cinch (XLR 3M)

Weight: approx. 96 g (S/PDIF), approx. 130 g (AES/EBU)

Width: 32 mm, Height: 26 mm, Length: 105 mm

Power supply: 90-240 V, 50/60 Hz

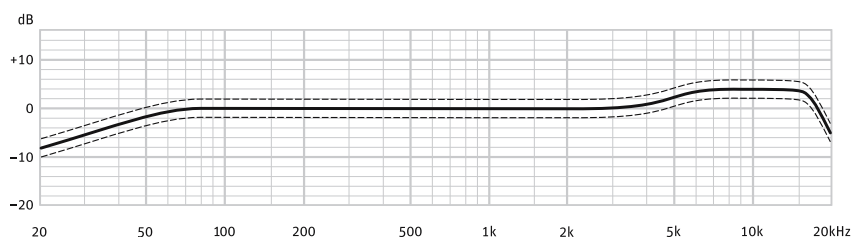
All data with respect to 0 dB pre-attenuation and 0 dB gain.

¹⁾ Remote control for example with DMI-2

²⁾ at 1 kHz, and 94 dB SPL

³⁾ re 94 dB SPL

⁴⁾ according to IEC 60268-1; CCIR-weighting according to CCIR 468-3, quasi peak; A-weighting according to IEC 61672-1, RMS



measured in free-field conditions (IEC 60268-4)

