CORE+ & MicroLock®

Launch Manual

The DNA of DPA

CORE+ by DPA

CORE+ is a revolutionary leap ahead in microphone design, blurring the lines between what is and isn't acoustically possible.

CORE+ is a technology that **neutralizes distortion** across the **entire dynamic range** of the microphone making any residual distortion **imperceptible** to the naked ear and virtually **unmeasurable.**

Removing these remnants of distortion allows sound engineers to capture a new level of audio clarity easily and efficiently, so they can shape an extraordinary listening experience for the audience.

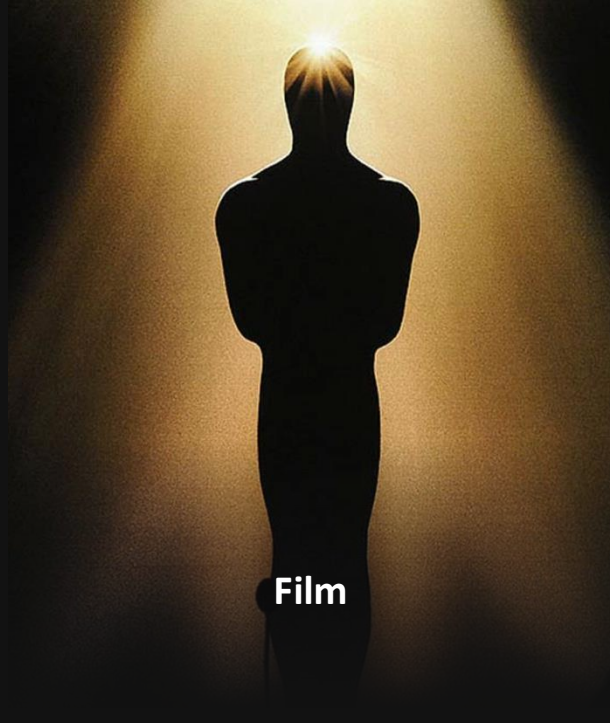
CORE+ applications

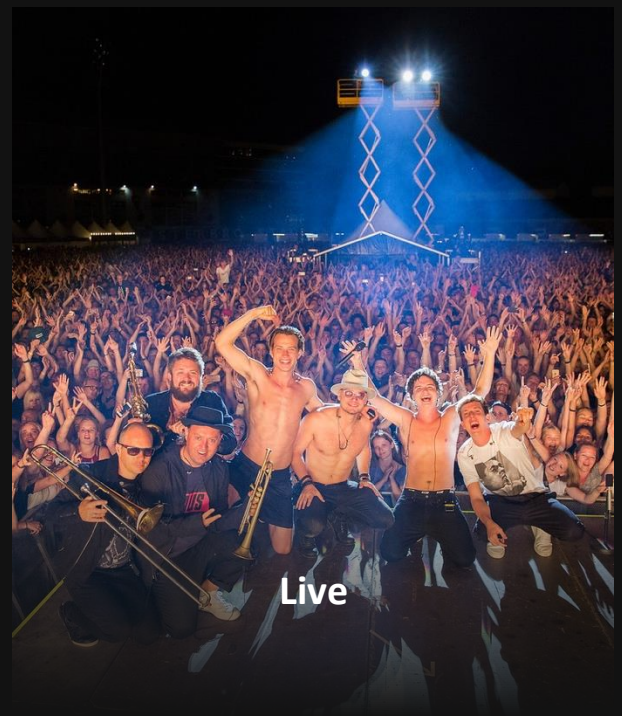
Microphones with CORE+ deliver crystal clear, distortion-free sound across the entire dynamic range of the microphone. Anyone seeking the highest possible sound quality will appreciate CORE+.

Whether recording or amplifying content, the sound will remain clear and completely undistorted by the microphone, even when the talent speaks or sings at louder volumes.

Especially at higher sound pressure levels and with multiple microphones on stage, the elimination of distortion will enhance the overall clarity and transparency of the entire sound image.

For miniature microphones in particular, sound professionals in theaters and film industry are the primary beneficiaries.





core vs CORE+, what is the difference?

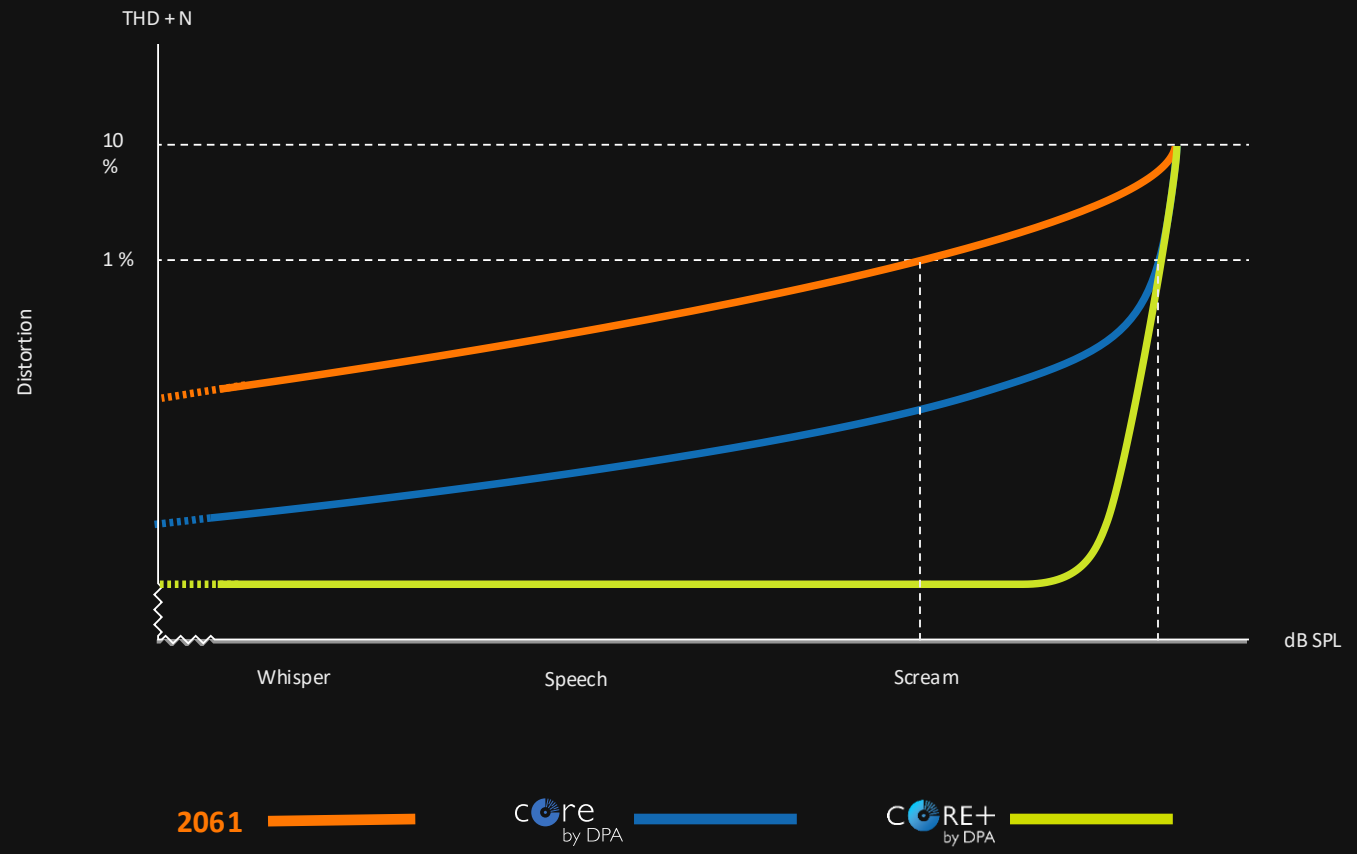
Microphones with CORE+ provide even more clarity across the entire dynamic range, from low to high sound pressure levels.

Miniature microphones with CORE+ provide unheard levels of openness.

While CORE allows mics to handle higher SPLs without significant artifacts up to 1% THD, CORE+ eliminates those artifacts completely.

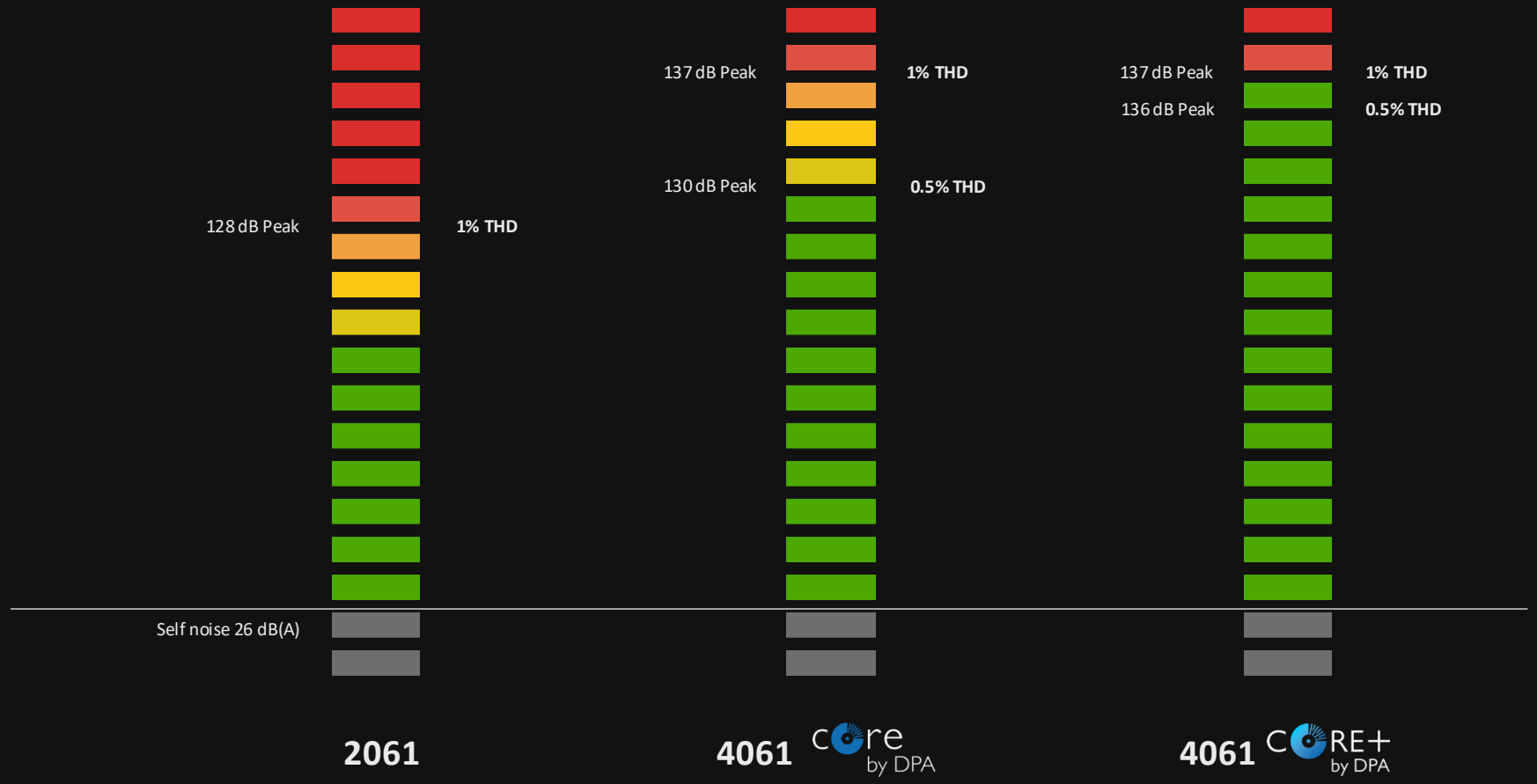
Listen to the difference:

Download here



core vs CORE+, what is the difference?

With CORE+ we have shifted the sound pressure level at which we achieve THD 0.5% to be nearly the same as THD 1%.

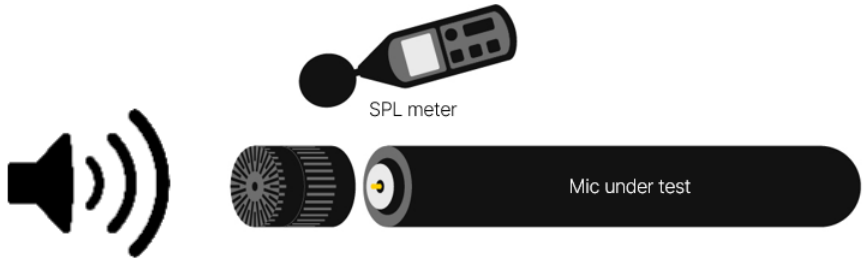


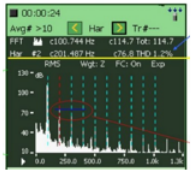
Specifications comparison: THD < 0.5%

All the usual specifications for microphones with CORE+ will remain the same, including the dynamic range, noise level, 1% and 10% distortion levels. CORE+ technology does not alter any of those parameters. Instead, it removes distortion across all sound pressure levels. To illustrate this, we are adding a new reference point: THD < 0.5%.

	4061 core by DPA	4061 CORE+ by DPA
Directional pattern	Omnidirectional	Omnidirectional
Cartridge type	Pre-polarized condenser	Pre-polarized condenser
Frequency response	20 Hz – 20 kHz	20 Hz – 20 kHz
Effective frequency range	20 Hz - 20 kHz, ±2 dB Soft boost grid: 3 dB soft boost @8 - 20 kHz High boost grid: 10 dB boost at 12 kHz	20 Hz - 20 kHz, ±2 dB Soft boost grid: 3 dB soft boost @8 - 20 kHz High boost grid: 10 dB boost at 12 kHz
Sensitivity, nominal, ±3 dB at 1 kHz	6.0 mV/Pa; -44 dB re. 1V/Pa	6.0 mV/Pa; -44 dB re. 1V/Pa
Equivalent noise level, A-weighted	Typ. 26 dB(A) re. 20 µPa (max.28 dB(A))	Typ. 26 dB(A) re. 20 µPa (max.28 dB(A))
Distortion, THD < 0.5%	**127 dB SPL RMS, 130 dB peak**	**133 dB SPL RMS, 136 dB peak**
Distortion, THD < 1%	134 dB SPL RMS, 137 dB SPL peak	134 dB SPL RMS, 137 dB SPL peak
Dynamic range	Typ. 111 dB	Typ. 111 dB
Max. SPL, THD 10%	144 dB SPL peak	144 dB SPL peak
Rated output impedance	30 - 40 Ω	30 - 40 Ω
Power supply for full performance	For wireless systems: Min. 5 V - max. 10 V through DPA adapter With DAD6001-BC: P48 (Phantom Power). Will work from 12 V	For wireless systems: Min. 5 V - max. 10 V through DPA adapter With DAD9001: P48 (Phantom Power). Will work from 12 V
Current consumption	Typ. 1.5 mA (microphone). 3.5 mA with DAD6001	Typ. 1.5 mA (microphone). 3.5 mA with DAD6001
Connector	MicroDot, TA4F, 3-pin LEMO, Mini-Jack	MicroLock, TA4F, 3-pin LEMO, Mini-Jack

How DPA measure THD



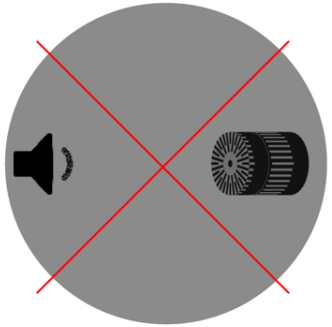


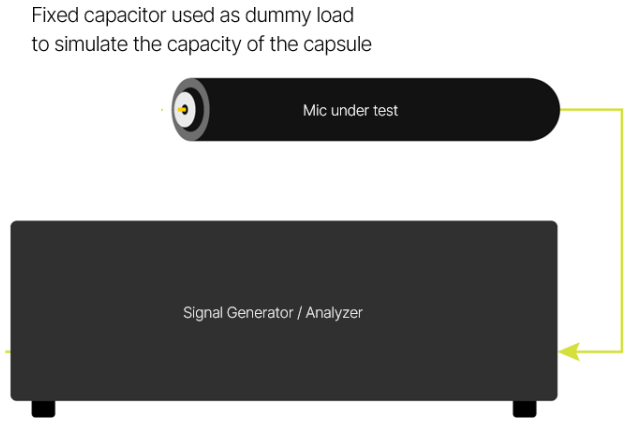
THD meter

Measuring the total harmonic distortion (THD) of a microphone is a very complex task, and there is no standardized method of performing this measurement.

Accurately measuring very high Sound Pressure Levels (SPLs) requires a sound generation system that does not introduce its own distortion. **DPA has perfected this technique** over many years of research, allowing us to perform precise Total Harmonic Distortion (THD) measurements. As a result, we can assess the **true performance** of both our own microphones and those of our competitors.

How most other manufacturers measure THD





To simplify the process, many brands treat the **capsule as an *"ideal element"*** and instead focus on determining the maximum input level the amplifier can handle, hereby only measuring half of the microphone during the THD test. Thus, the THD value is measured as **equivalent electrical input signal**, which does not account for the contributions of the capsule or the interactions between the capsule and the preamp.

Using this measured **value provides limited insight**. However, if you carefully examine the specifications from even the most respected manufacturers, you'll often find a small-print disclaimer stating that only the amplifier is being measured:

DESCRIPTION DATA & DIAGRAMS ACCESSORIES DOWNLOADS

Maximum SPL for THD 0.5%[2)]	153 dB

2) measured as equivalent el. input signal

Transition to CORE+

The implementation of CORE+ technology requires a redesign of our microphones, meaning it will take some time to update our entire portfolio. We are beginning with our **5 mm omnidirectional** microphones, including headsets and lavaliers, followed by the **5 mm cardioid** models.

Following microphones will get CORE+ in the beginning of 2025:

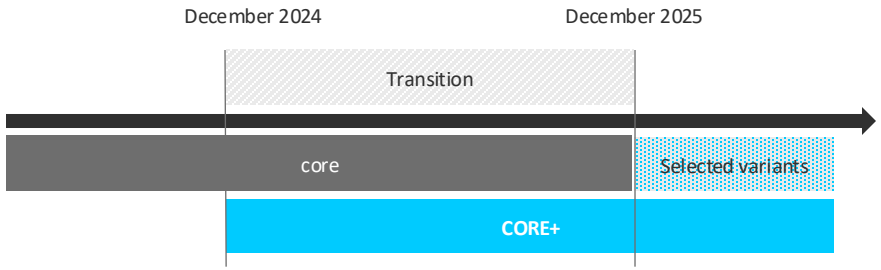
Omnidirectional: 4060 / 4061 / 4071 / 4661 / 4066 / 4266 / 4466

Followed by **Cardioid:** 4088 / 4188 / 4288 / 4488 and **omni** 4166 / 4062

While CORE+ technology has the potential to be integrated into other microphones beyond the 5 mm miniatures, we are currently unable to provide the timeline for this new development.

4. Other mics

Headsets and lavaliers



Given that CORE+ technology offers significant advancements over CORE, we do plan to eventually phase out all CORE models and replace them with CORE+.

However, we understand the importance of a smooth transition for our partners and customers. Therefore, we will offer a transition period of up to 9-12 months during which both CORE and CORE+ variants will be available. This approach is designed to make the shift from CORE to CORE+ as seamless as possible for both our partners and end-users.

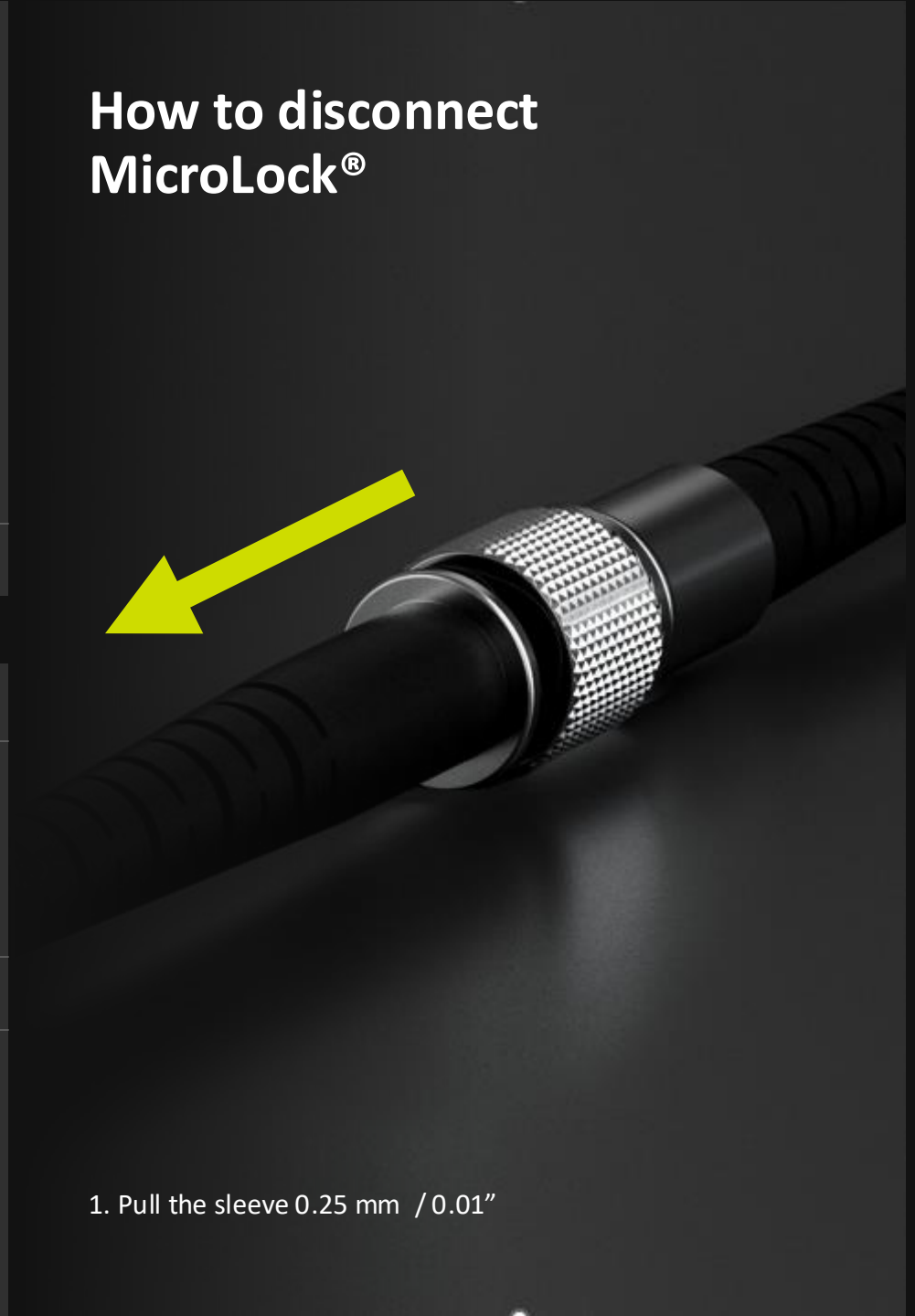
MicroLock®

A dependable microphone connector with **limitless flexibility** and **reassuring reliability**.

Key Selling Points

- **Flexibility** – cost-effective solution ensures compatibility with many wireless systems via adaptors.
- **Reliability** – secure locking function and wear-resistant design ensures an exceptionally stable connection, minimizing the risk of accidental disconnections.
- **Durability** – robust, reliable and designed to withstand the long-term rigors of everyday professional use.
- **Compact size** – perfect when space is limited or when the solution must be unnoticeable.

How to disconnect MicroLock®



1. Pull the sleeve 0.25 mm / 0.01”

2. Turn the sleeve 110°

3. MicroLock is now disconnected

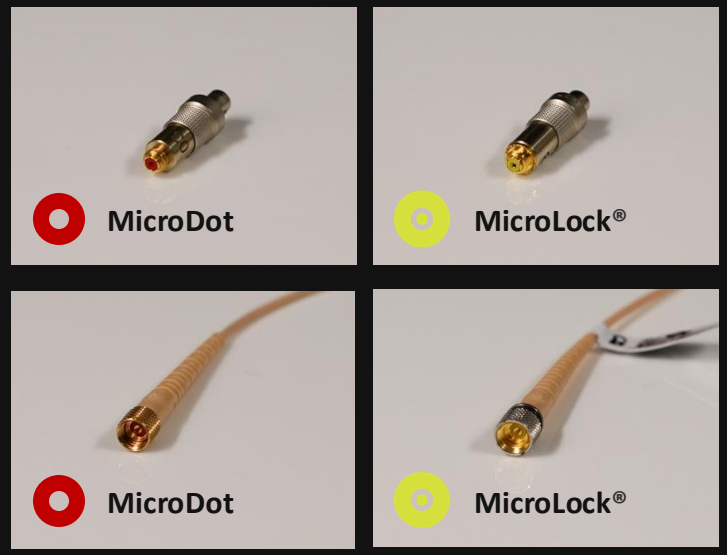
MicroLock® compatibility

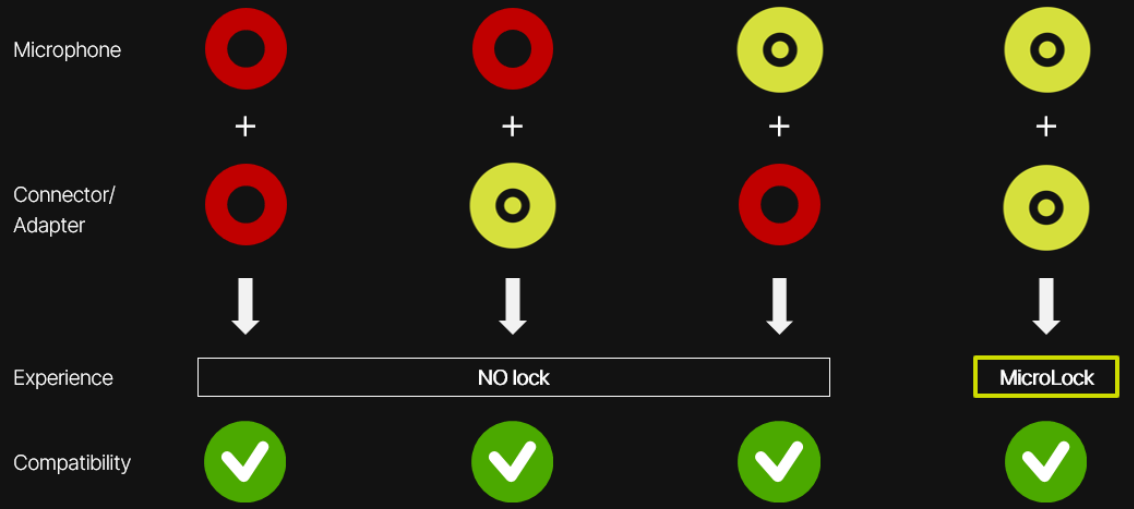
We have made MicroLock fully backwards compatible with the MicroDot connection.

This means that MicroLock parts can be assembled with MicroDot parts and function as if they were of MicroDot type.

Please note that the locking function is only available if both the male and female parts are MicroLock.

MicroDot tool works for MicroLock®





Marketing assets

from Nov 25

- Q&A documents
- Press Release
- Website texts
- Newsletters
- Selected images
- Print ads

from Jan 10

- Teaser video
- Campaign video
- Explainer video
- SoMe videos
- Web banners
- Sound samples

Jan 16

MicroLock® announcement

Copenhagen 6 PM CET
Los Angeles 9 AM PST

Jan 23

NAMM believe in music

CORE+ announcement

Copenhagen 6 PM CET
Los Angeles 9 AM PST

Post launch

- Testimonials
- Reviews
- MicUni articles
- Public webinar

Download here

Full package can be downloaded on January 10, 2024

Campaign and product images

Download here

Full package can be downloaded on January 10, 2024

CORE+ sound samples

Microphones with CORE+ provide even more clarity across the entire dynamic range, from low to high sound pressure levels. Miniature microphones with CORE+ provide unheard levels of openness. While CORE allows mics to handle higher SPLs without significant artifacts up to 1% THD, CORE+ eliminates those artifacts completely.

In a real-life audio comparison, CORE+ microphones, because of their lack of distortion, sound more open and more natural than other good microphones in their class.

Listen to the difference:

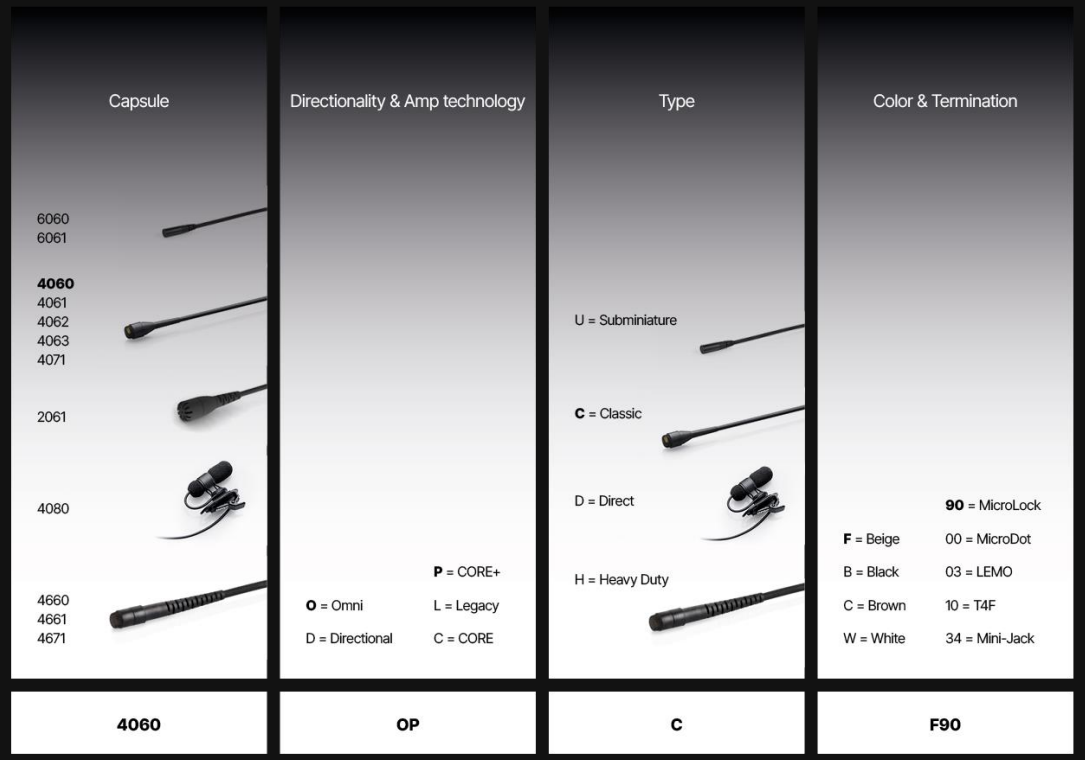
Download here

Order information I

Open for orders: from November 12, 2024

Shipping starts from:	Latest Jan 2, 2025	Feb, 2025
6060/6061	✓	
6066	✓	
Passive adapters	✓	
4060/4061/4071/4661/ 4560	✓	
4066/4266/4466	✓	
4088/4188/4288/4488		✓
4166/4062		✓

P = CORE+ **90** = MicroLock®



Order information II

Open for orders on **November 12, 2024**
Shipping from DK starts latest on **January 2, 2025**

Product ID*	Product description	EAN	EUR	DKK	GBP
6060-OC-U-B90	6060 CORE Omni Submini Mic, Normal SPL, Black, MicroLock	5713055026615	505	3.675	435
6060-OC-U-C90	6060 CORE Omni Submini Mic, Normal SPL, Brown, MicroLock	5713055026622	505	3.675	435
6060-OC-U-F90	6060 CORE Omni Submini Mic, Normal SPL, Beige, MicroLock	5713055026639	505	3.675	435
6060-OC-U-W90	6060 CORE Omni Submini Mic, Normal SPL, White, MicroLock	5713055026646	505	3.675	435
6061-OC-U-B90	6061 CORE Omni Submini Mic, Loud SPL, Black, MicroLock	5713055026653	505	3.675	435
6061-OC-U-C90	6061 CORE Omni Submini Mic, Loud SPL, Brown, MicroLock	5713055026660	505	3.675	435
6061-OC-U-F90	6061 CORE Omni Submini Mic, Loud SPL, Beige, MicroLock	5713055026677	505	3.675	435
6061-OC-U-W90	6061 CORE Omni Submini Mic, Loud SPL, White, MicroLock	5713055026684	505	3.675	435
6066-OC-R-B90	6066 CORE Omni Headset Mic, Black, MicroLock	5713055026691	775	5.775	680
6066-OC-R-C90	6066 CORE Omni Headset Mic, Brown, MicroLock	5713055026707	775	5.775	680
6066-OC-R-F90	6066 CORE Omni Headset Mic, Beige, MicroLock	5713055032203	775	5.775	680
DAD9003	Adapter: MicroLock to 3-pin LEMO	5713055026943	85	625	75
DAD9004	Adapter: Audio Ltd. Tx 2000/Tx 2020/Tx 2040	5713055026950	125	930	110
DAD9010	Adapter: MicroLock to TA4F Mini-XLR	5713055026974	85	625	75
DAD9034	Adapter: MicroLock to Mini-Jack	5713055027117	85	625	75

*For the full list of the new product IDs, please refer to the price list that is distributed together with the Launch Manual.

Official launch dates

MicroLock®

Thursday, January 16
18:00 CET (6 PM)

CORE+ by DPA

Thursday, January 23
18:00 CET (6 PM)

THANK
YOU