4099 CORE+ & Clip Program

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.

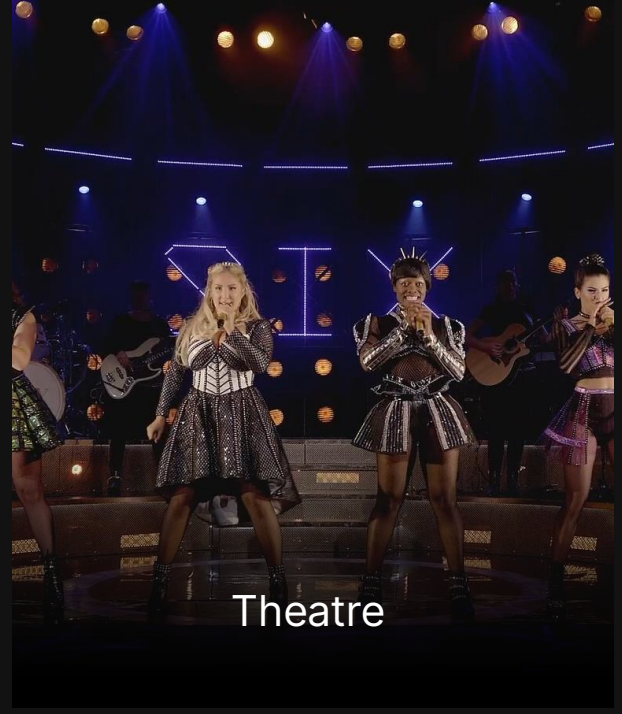
4099 CORE+ applications: instrument miking

The DPA 4099 has long been the industry standard for instrument miking, trusted by musicians and sound engineers worldwide for its exceptional sound quality, isolation and versatility. Its ease of use, unobtrusive design and flexibility across multiple instruments have made it the natural choice for professionals.

With CORE+, we take our approach to distortion reduction to an entirely new level, surpassing even our own top-tier CORE by DPA technology—elevating the 4099 to new heights of performance.

Beyond CORE+, we have also reimagined the 4099's clip system, making it more intuitive, more secure and easier to use than ever before.

All this, to set a new benchmark for excellence in instrument miking with the enhanced 4099 and its upgraded clip program.


Theatre


House of Worship


Live


Studio

Key selling points

A next-generation, high-performance instrument microphone featuring CORE+ technology, delivering pristine, natural and undistorted sound with exceptional isolation and off-axis rejection for any live or studio setting.

Acoustical design and advanced mechanical isolation work together capturing the sound you want, not the noise you don't

Lightweight, with minimal visual intrusion of the design

Reliable MicroLock® connector

The instrument's true voice at any sound pressure level with CORE+ technology that eliminates distortion

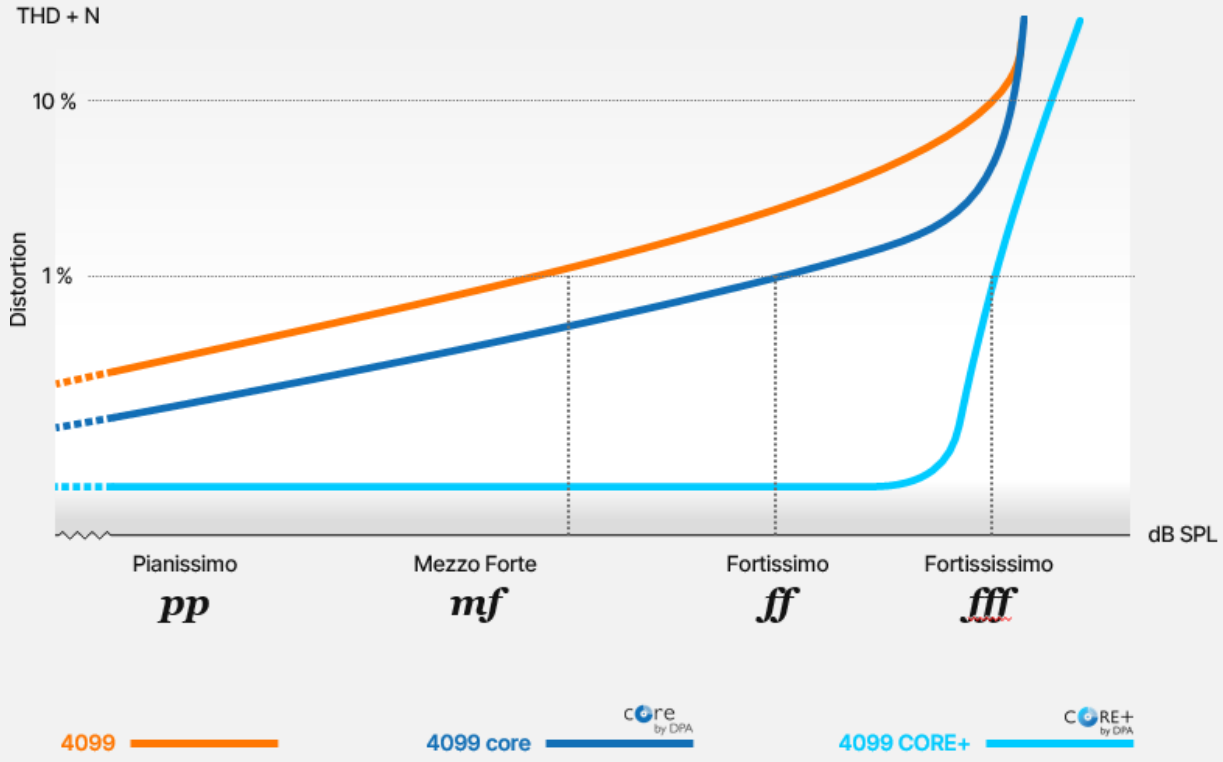
One microphone, endless possibilities with the upgraded flexible instrument clip program

4099 core vs 4099CORE+

CORE+ microphones deliver even greater clarity across the entire dynamic range, from the quietest passages to extremely high SPLs. They offer an unprecedented sense of openness in a miniature form factor. While the original CORE technology enabled 4099 microphones to handle high SPLs with minimal artifacts (typically staying below 1% THD), CORE+ virtually eliminates distortion across the full dynamic range—from self-noise all the way up to clipping.

On some instruments like grand piano and horns, where the harmonic structure is essential to the instrument's natural character, even minor artifacts can compromise the sound. With CORE+, this risk is dramatically reduced, preserving the integrity of the source.

The increased dynamic range of CORE+ also broadens the use case for the Loud SPL (6 mV/Pa) variant (marked with a red ring). The effective clipping point is now raised significantly—up to 145 dB SPL peak—setting a new benchmark in miniature microphone performance.



4099 CORE Extreme SPL 2 mV/Pa sensitivity	4099 CORE Loud SPL 6 mV/Pa sensitivity	Effective frequency rang ±2 dB at 20 cm (7.9 in)	4099 CORE+ Loud SPL 6 mV/Pa sensitivity
80 Hz - 15 kHz with 2 dB soft boost at 10-12 kHz	80 Hz - 15 kHz with 2 dB soft boost at 10-12 kHz		80 Hz - 17 kHz with 2 dB soft boost at 10-12 kHz
126 dB SPL RMS, 129 dB SPL peak	126 dB SPL RMS, 129 dB SPL peak	THD < 0.5%	135 dB SPL RMS, 138 dB SPL peak
134 dB SPL RMS, 137 dB SPL peak	128 dB SPL RMS, 131 dB SPL peak	THD < 1%	138 dB SPL RMS, 141 dB SPL peak
152 dB SPL peak	142 dB SPL peak	Max SPL THD 10%	145 dB SPL peak
Typ. 109 dB	Typ. 108 dB	Dynamic range	Typ. 118 dB

4099 CORE+ specification overview

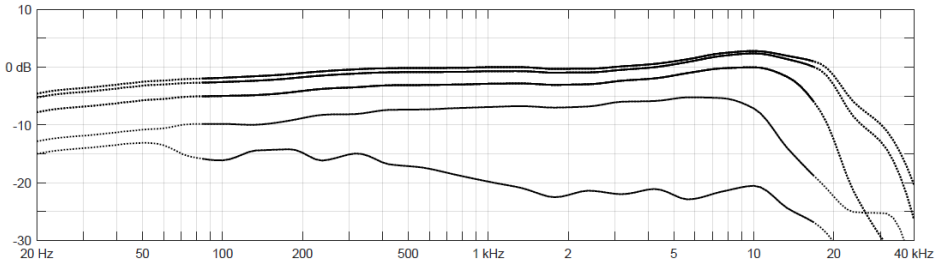
	4099-DP-1 Loud SPL	4099-DP-2* Extreme SPL *Available in Q4 2025
Directional pattern	Supercardioid	Supercardioid
Cartridge type	Pre-polarized condenser	Pre-polarized condenser
Frequency response	20 Hz – 20 kHz	20 Hz – 20 kHz
Effective frequency range	80 Hz - 17 kHz with 2 dB soft boost at 10-12 kHz	TBC
Sensitivity, nominal, ±3 dB at 1 kHz	6.0 mV/Pa; -44 dB re. 1V/Pa	2.0 mV/Pa; -54 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%	135 dB SPL RMS, 138 dB peak	TBC
Distortion, THD < 1%	138 dB SPL RMS, 141 dB SPL peak	TBC
Dynamic range	Typ. 118 dB	TBC
Max. SPL, THD 10%	145 dB SPL peak	TBC
Rated output impedance	From MicroLock®: 30 - 40 Ω. From DAD9099 or DAD9001: 100 Ω	From MicroLock®: 30 - 40 Ω. From DAD9099 or DAD9001: 100 Ω
Power supply for full performance	For wireless systems: Min. 5 V - max. 10 V through DPA adapter With DAD9001: 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 DAD9001 or DAD9099	Typ. 1.5 mA (microphone). 3.5 mA with DAD6001 or DAD9099
Connector	MicroLock®	MicroLock®

Frequency response and polar pattern

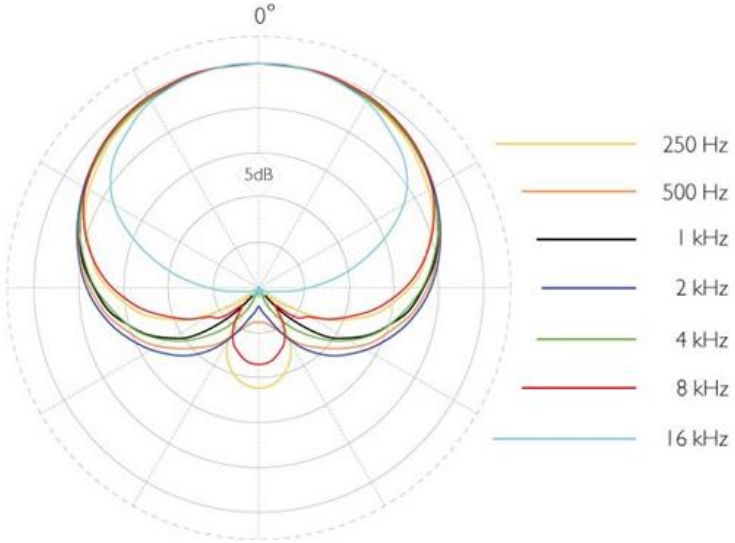
Effective frequency range, ±2 dB, at 20 cm (7.9 in) is from 80 Hz - 17 kHz with a smooth 2 dB soft boost at 10-12 kHz

Due to proximity effect, placement closer than 20 cm will add low-end response resulting in either a fuller low-frequency sound or an exaggerated low-frequency balance. This can be easily adjusted as needed.

Placement further away than 20 cm will, on the other hand, reduce the low-end pick-up.



DPA 4099 frequency curve measured at 20 cm (7.9 in)



Typical directional characteristics of a 4099

Supercardioid polar pattern

We have gone the extra mile to make the off-axis rejection as effective as possible and to create an off-axis response that is more uniform and linear than most other similar mics on the market.

For the DPA 4099, at higher frequencies (8 kHz, 16 kHz) there is a noticeable emphasis on the forward direction and substantially increased rejection from the sides and rear. This gives a more focused sound capture in the upper frequencies. It also has a more consistent rejection of unwanted sound from the rear at higher frequencies, making it ideal for isolated sound capture in noisy environments.

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

4099 mechanical changes

IP 58 CERTIFIED

Modernized flocked foam

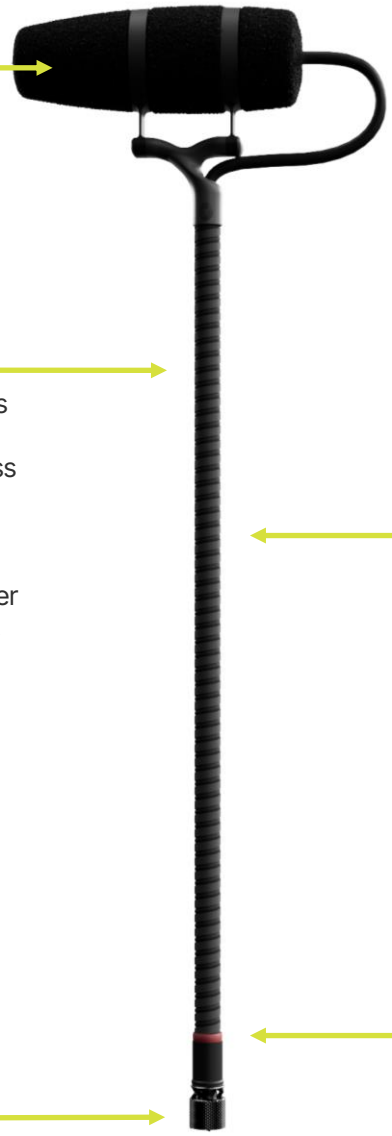
Design and finish with less light reflection and better durability.

Special matte Nextel® gooseneck coating

Minimizes light reflection. This coating absorbs up to 98% of incoming light, reflecting only about 2% through diffuse scattering, regardless of the angle of incidence. Its high absorption rate is ideal for environments where reducing glare is essential. Additionally, the coating retains its low-reflectance properties even after exposure to heat and intense optical radiation, ensuring long-term durability and reliability in demanding performance settings.

Gives the MicroLock® connector a sleek, unobtrusive appearance.

Black PVD treatment



Superior microphone suspension

An enhanced shock mount and microphone body design improves isolation from instrument vibrations and stage noise. This ensures a cleaner signal and a more homogenous instrument sound.

Gooseneck lock with larger diameter

Included as a standard accessory with all 4099 CORE+.

Discreet sensitivity indication

Subtle color accents for sensitivity markings and stereo pairs, maintaining a refined aesthetic.

Active adapters

- **Optimized for CORE+** performance
- MicroLock®
- **New mechanical design** with a more **robust** solid metal body and **easy** belt-clip repositioning
- Mounting possible in racks and stage boxes even **with belt clip** mounted
- New electrical design with excellent **isolation from RF noise**

DAD9099
(80 Hz low-cut)

DAD9001

Backwards compatible

core by DPA

core by DPA

LIMITED

CORE+ by DPA

CORE+ by DPA

N-SERIES

CORE+ by DPA

New Gooseneck Mount (G-MOUNT)

The most significant update is the introduction of a new gooseneck locking mechanism: the Gooseneck Mount (G-MOUNT). This innovation replaces the previous rubber base on the clip, as well as the separate gooseneck lock used in earlier versions of the 4099.

The new Gooseneck Mount (G-MOUNT) replaces two parts that were necessary to mount the 4099 (Rubber Mount and Gooseneck Lock) and features a two-step locking mechanism for effortless and precise gooseneck positioning with just one hand:

Step 1: Open the lever. The gooseneck is placed in the clip, where it is held securely without slipping, allowing you to rotate the gooseneck or adjust the microphone's height freely

Step 2: Close the lever. The locking mechanism is engaged by clicking the lever down, securely fixing the gooseneck's position

The rubber base of the Gooseneck Mount features a two-material construction, which:

- Enhances isolation from structure-borne noise
- Maintains full compatibility with existing clips: AC4099, DC4099, CM4099, CS4099 and UC4099

You can purchase the G-MOUNT as a separate accessory, allowing you to upgrade your existing AC4099, DC4099, DM4099, CS4099 and UC4099 with this new improved mechanism.

New clips

New G-Mount known design

U-CLIP
Universal Microphone Clip

A-CLIP
Microphone Clip for Accordion

CS-CLIP
Cold Shoe Microphone Clip with standard 1/4 in thread

CM-CLIP
Clamp Mount Microphone Clip

D-CLIP
Microphone Clip for Drum

New design

P-CLIP
Microphone Clip for Piano

C-CLIP
Microphone Clip for Cello

MS-CLIP
Microphone Stand Clip 3/8" and 5/8" thread

No change

BC4099
Microphone Clip for Bass

STC4099
Microphone Clip for Sax and Trumpet

VC4099
Microphone Clip for Violin and Mandolin

GC4099
Microphone Clip for Guitar

XLR-MOUNT

The XLR-MOUNT is a valuable extension to DPA's instrument clip lineup.

Featuring the same rubber base as the Gooseneck Mount, it seamlessly slides on to all clips compatible with the G-MOUNT.

Designed to securely hold a 19 mm pencil microphone or XLR adapter, its thumb-screw mechanism enables effortless angle adjustments without losing grip on the XLR or microphone. Like the G-MOUNT, it also provides effective structure-borne noise isolation.

Additionally, it can help manage cables for a neat and organized setup.

- Perfect lock on any XLR connector and 19 mm microphone
- Rotate the mic without losing grip
- Thumb screw for microphone angle adjustment
- Enhanced structure-borne noise isolation
- Available as a separate accessory with the product ID XLR-MOUNT