



4099 CORE Instrument Microphones



The award-winning 4099 has been updated with CORE by DPA technology. The series is designed with a supercardioid polar pattern for high rejection and superior gain-before-feedback. The mics retain a uniform off-axis frequency response. The 4099 is very adaptable, due to the wide selection of ingenious mounting options offered. In fact, the same microphone can be used with 10 different clips, allowing it to be used on almost any instrument. The correct variant to use depends on the type of instrument the mic is being used on.

4099 for Loud SPL

4099-DC-1-101-A for Accordion
4099-DC-1-201-B for Bass
4099-DC-1-201-C for Cello
4099-DC-1-101-CM with Clamp Mount
4099-DC-1-199-G for Guitar
4099-DC-1-101-P for Piano
4099-DC-1-199-S for Saxophone
4099-DC-1-101-SM with Stand Mount
4099-DC-1-101-U Universal
4099-DC-1-199-V for Violin

4099 for Extreme SPL

4099-DC-2-201-D for Drum
4099-DC-2-199-T for Brass

Visit dpa-microphones.com/how2dvote to learn how to correctly position your 4099 on your instrument.

Specifications

Directional pattern

Supercardioid

Principle of operation

Pressure gradient

Cartridge type

Pre-polarized condenser

Frequency response

20 Hz - 20 kHz

Effective frequency range ± 2 dB, at 20 cm (7.9 in)

80 Hz - 15 kHz with 2 dB soft boost at 10 - 12 kHz

Second order low-cut filter at 80 Hz with DAD4099-BC

Sensitivity, nominal ± 3 dB at 1 kHz

4099 for Loud SPL: 6 mV/Pa; -44 dB re. 1 V/Pa

4099 for Extreme SPL: 2 mV/Pa; -54 dB re. 1 V/Pa

Equivalent noise level, A-weighted

4099 for Loud SPL: Typ. 23 dB(A) re. 20 μ Pa (max. 26 dB(A))

4099 for Extreme SPL: Typ. 28 dB(A) re. 20 μ Pa (max. 31 dB(A))

Distortion, THD < 1%

4099 for Loud SPL: 128 dB SPL RMS, 131 dB SPL peak

4099 for Extreme SPL: 134 dB SPL RMS, 137 dB SPL peak

Dynamic range

4099 for Loud SPL: Typ. 108 dB

4099 for Extreme SPL: Typ. 109 dB

Max. SPL, THD 10%

4099 for Loud SPL: 142 dB

4099 for Extreme SPL: 152 dB

Output impedance

From MicroDot: 30 - 40 Ω

From DAD4099-BC/DAD6001-BC: 100 Ω

Cable drive capability

Up to 300 m (984 ft) with DAD4099-BC or DAD6001-BC XLR Adapter

Output balance principle

Signal balanced with DAD4099-BC or DAD6001-BC XLR Adapter

Common mode rejection ratio (CMRR)

> 60 dB from 50 Hz to 15 kHz with DAD4099-BC or DAD6001-BC XLR Adapter

Power supply (for full performance)

Min. 5 V - max. 50 V through DPA adapter for wireless systems

48 V phantom power ± 4 V with DAD4099-BC or DAD6001-BC XLR Adapter

Current consumption

Typ. 1.5 mA (microphone)

3.5 mA with DAD4099-BC or DAD6001-BC XLR Adapter

Connector

MicroDot

Microphone length

45 mm (1.8 in)

Cable length / cable diameter

1.8 m (5.9 ft) / 1.6 mm (0.06 in) or 2.2 mm (0.09 in)

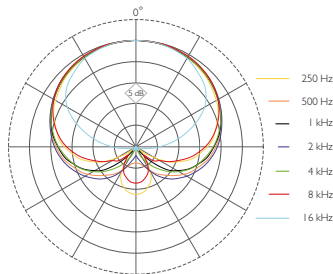
Gooseneck length

140 mm (5.5 in)

Capsule diameter

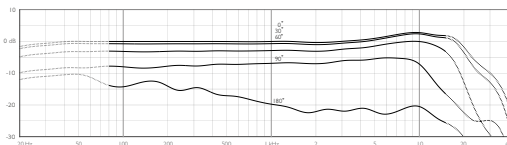
5.4 mm (0.21 in)

Polar pattern



Frequency response

Measured at 20 cm (7.9 in)



Cable and adapter overview

Mic	SPL range	Cable	XLR connection
4099-DC-1-101-A	For Loud SPL - up to 142 dB	1.6 mm (0.06 in)	DAD6001-BC
4099-DC-1-201-B	For Loud SPL - up to 142 dB	2.2 mm (0.09 in)	DAD6001-BC
4099-DC-1-201-C	For Loud SPL - up to 142 dB	2.2 mm (0.09 in)	DAD6001-BC
4099-DC-1-101-CM	For Loud SPL - up to 142 dB	1.6 mm (0.06 in)	DAD6001-BC
4099-DC-2-201-D	For Extreme SPL - up to 152 dB	2.2 mm (0.09 in)	DAD6001-BC
4099-DC-1-199-G	For Loud SPL - up to 142 dB	1.6 mm (0.06 in)	DAD4099-BC
4099-DC-1-101-P	For Loud SPL - up to 142 dB	1.6 mm (0.06 in)	DAD6001-BC
4099-DC-1-199-S	For Loud SPL - up to 142 dB	1.6 mm (0.06 in)	DAD4099-BC
4099-DC-1-101-SM	For Loud SPL - up to 142 dB	1.6 mm (0.06 in)	DAD6001-BC
4099-DC-2-199-T	For Extreme SPL - up to 152 dB	1.6 mm (0.06 in)	DAD4099-BC
4099-DC-1-101-U	For Loud SPL - up to 142 dB	1.6 mm (0.06 in)	DAD6001-BC
4099-DC-1-199-V	For Loud SPL - up to 142 dB	1.6 mm (0.06 in)	DAD4099-BC



4099 for Loud SPL

4099 for Extreme SPL

core
by DPA

Service & repair

If you are not satisfied with the characteristics exhibited by this product, please go to dpamicrophones.com/service for instructions.

Warranty

4099 CORE Instrument Microphones are covered by a two-year limited warranty.

CE marking

This product conforms to all relevant directives approved by the European Commission.

