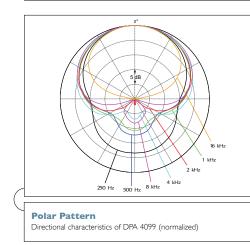


Universal Surface Mount

Foam windscreen for 4090/91 (included with 4090/91) Foam Windscreen for 4099 (included with all 4099 clip mics)

Double Cable, 5 m (16.4 ft)

Specifications for DPA 4099



Directional characteristics

Supercardioid

Principle of operation

Pressure gradient

Cartridge type

Pre-polarized condenser

Frequency range

20 Hz - 20 kHz

Frequency range, ± 2 dB, 20 cm (7.9 in) distance

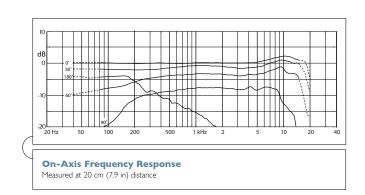
80 Hz - 15 kHz with 2 dB soft boost at 10 - 12 kHz Second order low-cut filter at 80 Hz with DAD4099

Sensitivity, nominal, ± 3 dB at 1 kHz

4099B/4099C/4099G/4099P/4099S/4099U/4099V: 6 mV/Pa; -44 dB re. I V/Pa 4099D/4099T: 2 mV/Pa; -54 dB re. I V/Pa

Equivalent noise level, A-weighted

4099B/4099C/4099G/4099P/4099S/4099U/4099V: Typ. 23 dB(A) re. 20 μPa (max. 26 dB(A)) 4099D/4099T:Typ. 28 dB(A) re. 20 μPa (max. 31 dB(A))



S/N ratio (A-weighted), re. I kHz at I Pa (94 dB SPL)

4099B/4099C/4099G/4099P/4099S/4099U/4099V:Typ. 71 dB(A) 4099D/4099T:Typ. 66 dB(A)

Total Harmonic Distortion (THD)

- < 1 % up to 123 dB SPL peak
- < 1 % up to 120 dB SPL RMS sine

Dynamic range

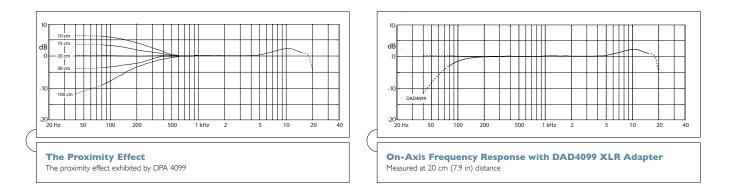
4099B/4099C/4099G/4099P/4099S/4099U/4099V: Typ, 100 dB 4099D/4099T: Typ, 95 dB

Max. SPL, peak before clipping

4099B/4099C/4099G/4099P/4099S/4099U/4099V: 142 dB 4099D/4099T: 152 dB

Output impedance

From MicroDot: 30 – 40 ohm From DAD4099/DAD6001-BC: 100 ohm



Cable drive capability

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

Output balance principle

Signal balanced with DAD4099 or DAD6001-BC XLR adapter

Common Mode Rejection Ratio (CMRR)

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

Power supply (for full performance)

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

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

Current consumption

Typ. I.5 mA (microphone)

3.5 mA with DAD4099 or DAD6001-BC XLR adapter

Connector

MicroDot

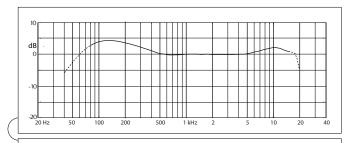
Color

Black

Weight

4099B: 46 g (1.62 oz) 4099C: 38 g (1.34 oz) 4099D: 38 g (1.34 oz) 4099G: 36 g (1.27 oz) 4099P: 46 g (1.62 oz) 4099S: 31 g (1.1 oz) 4099T: 31 g (1.1 oz) 4099U: 41 g (1.4 oz) 4099V: 33 g (1.16 oz) **Capsule diameter**

5.4 mm (0.2 in)



On-Axis Frequency Response with DAD4099 XLR Adapter Measured at 10 cm (3.9 in) distance

Microphone length

45 mm (1.8 in)

Gooseneck length

140 mm (5.5 in)

Cable length

I.8 m (6 ft)

Polarity

+V at MicroDot pin for positive sound pressure

(and pin 2 on DAD4099 or DAD6001-BC XLR adapter)

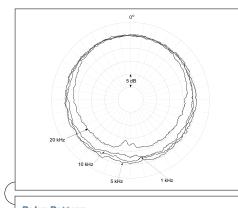
Operating temperature range

-40 °C to 45 °C (-40 °F to 113 °F)

Operating relative humidity

Up to 90 %

Specifications for DPA 4090 & 4091



Polar Pattern Directional characteristics of DPA 4090 & 4091 (normalized)

Directional characteristics

Omnidirectional

Principle of operation

Pressure

Cartridge type

Pre-polarized condenser

Frequency range, ± 2 dB

20 Hz – 20 kHz

Sensitivity, nominal, ± 3 dB at 1 kHz

4090: 20 mV/Pa; -34 dB re. | V/Pa

4091:6 mV/Pa; -44 dB re. 1 V/Pa

Equivalent noise level, A-weighted

4090:Typ. 23 dB(A) re. 20 μPa (max. 26 dB(A)) 4091:Typ. 26 dB(A) re. 20 μPa (max. 28 dB(A))

Equivalent noise level, ITU-R BS.468-4

4090: Typ. 35 dB (max. 38 dB) 4091: Typ. 38 dB (max. 40 dB)

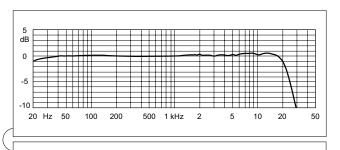
S/N ratio, re. I kHz at I Pa (94 dB SPL) 4090: Typ. 71 dB(A) 4091: Typ. 68 dB(A)

Total Harmonic Distortion (THD) < 1 % up to 123 dB SPL peak

Dynamic range

4090:Typ. 100 dB; 4091:Typ. 97 dB

Max. SPL, peak before clipping 4090: | 34 dB: 409 |: | 44 dB



On-Axis Frequency Response

Output impedance < 40 ohm Cable drive capability Up to 300 m (984 ft) **Output balance principle** Impedance balanced **Common Mode Rejection Ratio (CMRR)** > 40 dB **Power supply (for full performance)** 48 V Phantom power ± 4 V **Current consumption** 2 mA Connector 3-pin XLR-M Color Black Dimensions Weight: 38 g (1.34 oz) Microphone diameter: 19 mm (0.75 in); at tip: 6.7 mm (0.26 in) Capsule diameter: 5.4 mm (0.21 in) Microphone length: 122 mm (4.8 in) **Polarity** +V at pin 2 for positive sound pressure **Operating conditions** Temperature range: -40 °C to 45 °C (-40 °F to 113 °F) **Operation relative humidity** Up to 90 %