



#### 4099C, d:vote™ 4099C Clip Microphone for Cello

Perfect for PA amplification and live recording of a cello, the 4099C offers a sound that is considerably more natural than an internal microphone or pick-up.

- Natural sound and high isolation
- Superior gain-before-feedback
- Flexible and easy mounting
- Mount has no impact on acoustic sound
- Detachable cable and versatile gooseneck extender

Perfect for PA amplification and live recording of a cello, the 4099C offers a sound that is considerably more natural than an internal microphone or pick-up as well as several excellent placement possibilities.

The 4099C is a unique clip microphone inheriting the sonic approach from the legendary DPA studio microphones to a new instrument microphone. The 4099C microphone and mounting system is meticulously designed and optimized for the violoncello. This is to ensure the best possible mount and audio reinforcement is achieved when performing live. The 4099C attaches to the C and A string below the bridge and allows for microphone capsule placement in the sweet spot between bridge and fingerboard, offering a unique combination of natural string sound and high audio separation on stage.

Representing years of research and development, the 4099 condenser microphones feature supercardioid polar patterns for superior gain-before-feedback. Fully capable of handling the cello's dynamic range and subtle details, these microphones live up to their pedigree with sound as accurate as DPA's other world-class microphones.

Despite its tiny, discreet size and elegant, lightweight design, the 4099C is extremely rugged. The versatile gooseneck provides stable and repeatable positioning. The mics can be easily unclipped and repositioned or moved to another instrument, while the mounting system is designed never to mar or scratch the finish of your instrument nor changing the sonic character of it.

Through the use of our extensive adapter system, the 4099 can be used as a standard 48V phantom powered microphone via the included XLR connector and is also compatible with virtually any wireless system.

Fleet owners of 4099s will appreciate the multiplicity of using the microphone for a number of different instruments simply by moving the microphone/gooseneck part to another instrument clip from the range.

With its very flexible design for a wide variety of mounting and positioning possibilities along with its extremely natural sound, the 4099 is truly a musician's mic without equal. Continuing DPA's heritage of sonic excellence, this series of microphones achieves the purest reproduction of your instrument and therefore your full range of expression.

Optional gooseneck extension Standard gooseneck length is 140 mm (5.5 in), which can be altered with the optional gooseneck extension unit, adding another 50% to the length, helping to achieve exactly the sweet spot for the instrument.

Detachable cables The updated 4099 range features detachable cable from gooseneck, so it's more convenient to mount the mic on an instrument before connecting it. Furthermore, the choice of different cable qualities makes it possible to tailor your mic to the specific task, such as choosing the heavy duty 2.2 mm cable for PA/Live gigs or the easier-to-hide, thinner miniature cable for personal mounting on instruments where you don't want the cable weight to interfere with your performance. In case of

cable break, service is easy and fast.

Adapters for wireless microphones A wide range of connection adapters makes it possible to use DPA miniature microphones with all professional UHF, VHF or digital wireless system available plus 48 V Phantom.

DPA has specific adapters for AKG, Audio Ltd., Audio-Technica, Beyerdynamic, Electro-Voice, Lectrosonics, Micron, Mipro, Pastega, Telex ProStar, Ramsa, Samson, Sennheiser, Shure, Sony, Toa, Vega and other systems. Each adapter for your cordless microphone is guaranteed to perfectly mate to your system of choice.

or more information please visit: ww.dpamicrophones.com

# 4099C, d:vote™ 4099C Clip Microphone for Cello

Directional characteristics:

Supercardioid

Principle of operation:

Pressure gradient

Cartridge type:

Pre-polarized condenser

Frequency range:

20 Hz to 20 kHz

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

distance:

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

Sensitivity, nominal, ±3 dB:

6 mV/Pa; -44.5 dB re. 1 V/Pa

Equivalent noise level A-weighted:

Typ. 23 dB(A) re. 20 µPa (max. 26 dB(A))

S/N ratio, re. 1 kHz at 1 Pa (94 dB SPL):

Total harmonic distortion (THD):

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

Dynamic range: 100 dB

Max. SPL, peak before clipping:

142 dB

Output impedance:

From MicroDot: 30 to 40 ohm, from DAD6001:

100 ohm

Cable drive capability:

300 m (984 ft) with DAD6001

Output balance principle:

Signal balanced with DAD6001 XLR adapter

Common Mode Rejection Ratio (CMRR):

> 60 dB at 50 Hz to 15 kHz with DAD6001 XLR adapter

Power supply:

Min. 5 V to max. 50 V through DPA adapter for wireless systems; 48 V phantom power ±4 V

with DAD6001 XLR adapter

Current consumption:

1.5 mA; 3.5 mA with DAD6001 XLR adapter

Connector:

MicroDot

Color:

Black

Weight:

33 g (1.16 oz)

Microphone length:

45 mm (1.8 in)

Cable length:

1.8 m (6 ft) Polarity:

Positively increasing sound pressure produces positive going voltage at MicroDot pin (and pin

2 on DAD6001 XLR adapter)

Operating temperature range: -40 °C to 45 °C (-40 °F to 113 °F)

Relative humidity:

Up to 90 %

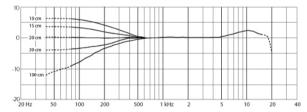
Gooseneck, length:

140 mm (5.5 in)

# **Diagrams**

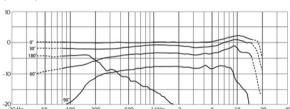
# 4099C, d:vote™ 4099C Clip Microphone for Cello

### The proximity effect exhibited by DPA 4099



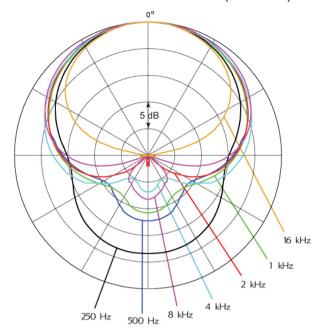
The proximity effect exhibited by DPA 4099

Typical on- and off-axis frequency response of DPA 4099 at 20 cm (7.9 in) distance



Typical on- and off-axis frequency response of DPA 4099 at 20 cm (7.9 in) distance

# Directional characteristics of DPA 4099 (normalized)



Directional characteristics of DPA 4099 (normalized)



Head Office DPA Microphones A/S Gydevang 42- 44 DK-3450 Alleroed Denmark Tel: +45 4814 2828 Fax: +45 4814 2700 info@dpamicrophones.com www.dpamicrophones.com

US Sales Office DPA Microphones, Inc. 1500 Kansas Avenue, Unit 3A Longmont, CO 80501 USA USA Tel: +1 303-485-1025 Fax: +1 303-485-6470 info-usa@dpamicrophones.com www.dpamicrophones.com