

4099T, d:vote™ 4099T Clip Microphone for Brass

An ideal tool for trumpet, trombone and other brass instruments, with or without mute, the 4099T effortlessly handles even the highest sound pressure levels.

Randy Brecker

- Handles extreme sound pressure levels
- Wireless compatible
- Flexible and easy one-hand mounting
- Fits any mute
- Detachable cable and versatile gooseneck extender

An ideal tool for trumpet, trombone and other brass instruments, with or without mute, the 4099T effortlessly handles even the highest sound pressure levels. Its innovative mounting mechanism makes it easy to move the mic between instruments with only one hand.

The 4099T is a unique clip microphone inheriting the sonic approach from the legendary DPA studio microphones to a new range of instrument microphones. The 4099 microphone and mounting system is meticulously designed and optimized for the brass family. This is to ensure the best possible mount and audio reinforcement is achieved when performing live.

Representing years of research and development, the 4099 condenser microphones feature supercardioid polar patterns for superior gain-before-feedback. Fully capable of handling the intense sound pressure levels from a trumpet, these microphones live up to their pedigree with sound as accurate as DPA's other world-class microphones.

Despite their tiny, discreet size and elegant, lightweight design, 4099 models are extremely rugged. The versatile gooseneck provides stable and repeatable positioning. The mics can be easily unclipped and

repositioned or moved to another instrument with only one hand, while the mounting system is designed never to mar or scratch the finish of your instrument. Any mute can be used together with the microphone and it is easy to place the trumpet in a stand while keeping the 4099 clip on the instrument.

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

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.

For more information please visit:
www.dpamicrophones.com

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

Sensitivity, nominal, ± 3 dB:

2 mV/Pa; -54 dB re. 1 V/Pa

Equivalent noise level A-weighted:

Typ. 28 dB(A) re. 20 mPa (max. 31 dB(A))

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

66 dB

Total harmonic distortion (THD):

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

Dynamic range:

95 dB

Max. SPL, peak before clipping:

152 dB

Output impedance:

From MicroDot: 30 to 40 ohm, from DAD4099-BC: 100 ohm

Cable drive capability:

Up to 300 m (984 ft) with DAD4099-BC

Output balance principle:

Signal balanced with DAD4099-BC XLR adapter

Common Mode Rejection Ratio (CMRR):

> 60 dB at 50 Hz to 15 kHz with DAD4099-BC XLR adapter

Power supply:

Min. 5 V to max. 50 V through DPA adapter for wireless systems; 48 V phantom power ± 4 V with DAD4099-BC XLR adapter

Current consumption:

1.5 mA; 3.5 mA with DAD4099-BC XLR adapter

Connector:

MicroDot

Color:

Black

Weight:

31 g (1.1 oz)

Capsule diameter:

5.4 mm (0.2 in)

Microphone length:

45 mm (1.8 in)

Cable length:

1.8 m (6 ft)

Cable color:

Black

Polarity:

Positively increasing sound pressure produces positive going voltage at MicroDot pin (and pin 2 on DAD4099-BC XLR adapter)

Operating temperature range:

-40 °C to 45 °C (-40 °F to 113 °F)

Relative humidity:

Up to 90 %

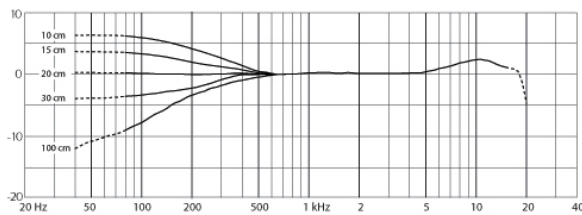
Gooseneck, length:

140 mm (5.5 in)

Diagrams

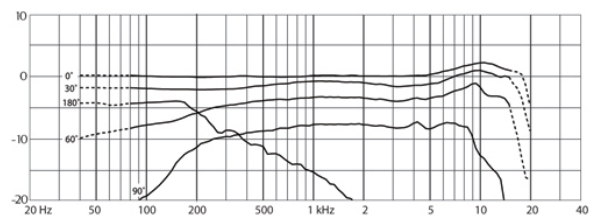
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The proximity effect exhibited by DPA 4099



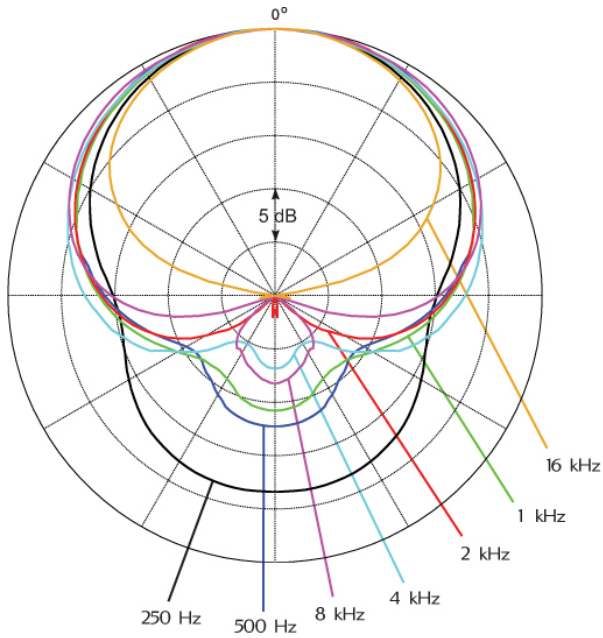
The proximity effect exhibited by DPA 4099

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)



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