

## 4099U, 4099U Universal Clip Microphone



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- Clean and natural sound
- Excellent frequency and phase response
- Compact, discreet size
- Unique mounting system fits numerous instruments

The 4099U is a microphone system especially designed to address the unique mounting challenges of slim bodied and unusually shaped instruments. It allows for high quality audio capture while the low profile and light weight of the unobtrusive design provides visual elegance along with uncompromised sound quality.

The creative design of the unique microphone clip includes a hook-and-loop fastener strap which allows the holder to fit numerous instruments of varying sizes and diameters such as oboe, clarinet, bassoon, recorder and flute. The hook-and-loop fastener band pulls tight to fit the circumference of the instrument, like a wrist watch on your arm. If using the clip on very large diameter instruments, additional hook-and-loop fastener straps can easily be added to extend the clip's capacity.

The 4099U includes a revolutionary new "90 degree" system which provides many more mounting options. By detaching the clip from the gooseneck and re-mounting it turned 90 degrees, the number of mic positions is doubled.

The 4099U includes a 3-pin XLR phantom power adapter. The UC4099 Universal Clip is available separately, and can be used with any of the various versions of the 4099 family.

The package includes  
A supercardioid gooseneck mic with cable  
Integrated windscreen and shock mount system  
Clip with hook-and-loop fastener to mount on various instruments (also available separately as UC4099)  
XLR adapter with belt clip

Products start shipping late November

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For more information please visit:  
[www.dpamicrophones.com](http://www.dpamicrophones.com)

# 4099U, 4099U Universal Clip Microphone

## Directional characteristics:

Supercardioid

## Principle of operation:

Pressure gradient

## Cartridge type:

Pre-polarized condenser

## Frequency range:

20 Hz to 20 kHz

## Frequency range, $\pm 2$ dB, 20 cm (7.9 in) distance:

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

## Sensitivity, nominal, $\pm 3$ dB at 1 kHz:

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

## Equivalent noise level, A-weighted:

Typ. 23 dB(A) re. 20  $\mu$ Pa (max. 26 dB(A))

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

71 dB

## 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:

Up to 300 m (984 ft) with DAD6001 XLR adapter

## Output balance principle:

Signal balanced with DAD6001 XLR adapter

## Common Mode Rejection Ratio (CMRR):

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

## Power supply (for full performance):

Min. 5 V to max. 50 V through DPA adapter for wireless systems; 48 V phantom power  $\pm 4$  V with DAD6001 XLR adapter

## Current consumption:

Typ. 1.5 mA (microphone). 3.5 mA with DAD6001 XLR adapter

## Connector:

MicroDot

## Color:

Black

## Weight:

41 g (1.4 oz)

## Capsule diameter:

5.4 mm (0.2 in)

## 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)

## Temperature range:

-40 °C to 45 °C (-40 °F to 113 °F)

## Relative Humidity (RH):

Up to 90%

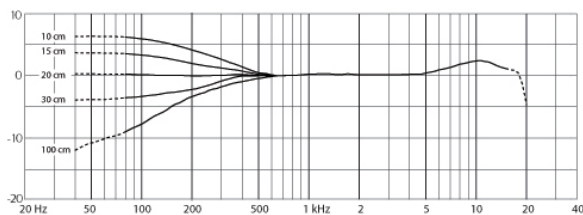
## Gooseneck length:

140 mm (5.5 in)

## Diagrams

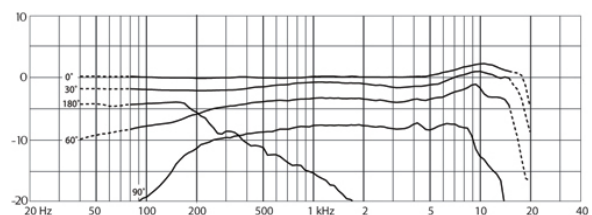
### 4099U, 4099U Universal Clip Microphone

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



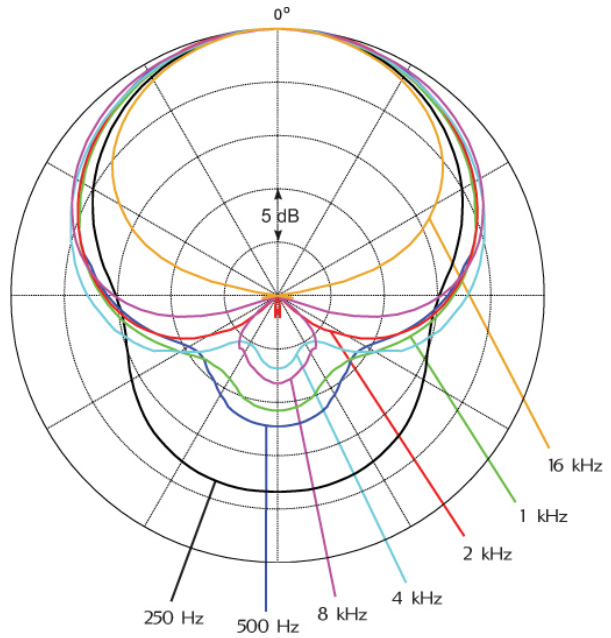
Typical on- and off-axis frequency response of DPA 4099 at 20 cm (7.9 in) distance

Changes in specifications for 4099 (low sens) if you supply less than 48V Phantom power

	48 V	42 V	36 V	32 V	24 V	18 V	12 V	9 V
Noise (dBA)	26	26	26	27	27	28	30	Not recommended
SPL limit dB	142	142	142	142	136	126	122	Not recommended
V RMS	3	2	1.8	1.4	0.8	0.25	0.15	Not recommended

Changes in specifications for 4099 (low sens) if you supply less than 48V Phantom power (click for larger view)

Directional characteristics of DPA 4099 (normalized)



Directional characteristics of DPA 4099 (normalized)



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