



## 4006A, 4006A Omni Microphone

- Neutrality
- Versatility
- Precision
- Recording standard

Timeless transparency

The versatile DPA 4006A is without doubt the most popular mic in our standard range and has rightly earned its status as a worldwide recording standard. This highly sought after omni has forged its enviable reputation over the past quarter of a century by repeatedly exhibiting its total transparency in any recording situation, and by picking up incredible detail and depth of sound. The definition of its high-frequency characteristics across a wide range of instruments is undeniably impressive for the vast majority of miking applications.

Renaissance microphone

With the 4006A, engineers, broadcasters and musicians alike can achieve extremely clean, natural and precise reproduction in a variety of applications. Ideal for A-B stereo pairs for symphonic concert hall recordings, the 4006A also excels on vocals and for close-miking instruments like grand piano, guitar, double bass and percussion.

Seven tools in one

A wide selection of acoustic modification accessories, including pressure equalizers, nose cone and interchangeable protection grids, allows the 4006A to be acoustically transformed into seven different microphone versions, making it the most multifaceted mic in your collection and a tremendous value. By simply changing a grid or mounting an element over the capsule, it is possible to gain seven unique frequency responses and directional characteristics from a single mic. Furthermore, these grids and elements will not produce any phase shift, noise or distortion that would otherwise be introduced by an electrical filter.

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For more information please visit:

[www.dpamicrophones.com](http://www.dpamicrophones.com)

# 4006A, 4006A Omni Microphone

## Directional characteristics:

Omnidirectional

## Principle of operation:

Pressure

## Cartridge type:

Pre-polarized condenser

## Frequency range:

10 Hz to 20 kHz

## Frequency range, $\pm 2$ dB:

10 Hz to 20 kHz

## Sensitivity, nominal, $\pm 2$ dB at 250 Hz:

40 mV/Pa; -28 dB re. 1 V/Pa

## Equivalent noise level, A-weighted:

Typ. 15 dB(A) re. 20  $\mu$ Pa (max. 17 dB(A))

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

Typ. 27 dB (max. 29 dB)

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

Typ. 79 dB(A)

## Total Harmonic Distortion (THD):

< 1 % up to 139 dB SPL peak

## Dynamic range:

Typ. 121 dB

## Max. SPL, peak before clipping:

147 dB

## Switchable attenuator:

0 dB / -20 dB

## Output impedance:

< 200 ohm

## Cable drive capability:

100 m (328 ft)

## Output balance principle:

Impedance balancing with Active Drive

## Common Mode Rejection Ratio (CMRR):

> 60 dB

## Power supply (for full specifications):

48 V Phantom power ( $\pm 4$  V)

## Current consumption:

2.8 mA

## Connector:

XLR-3M. Pin 1: shield, Pin 2: signal + phase, Pin 3: - phase

## Color:

Matte black

## Weight:

163 g (5.7 oz)

## Diameter:

16 to 19 mm (0.63 to 0.75 in)

## Capsule diameter:

16 mm (0.63 in)

## Length:

170 mm (6.7 in)

## Output voltage, RMS:

> 5 V

## Polarity:

+V at Pin 2 for positive sound pressure

## Temperature range:

-40 °C to 45 °C (14 °F to 113 °F)

## Relative Humidity (RH):

Up to 90 %

## Matching tolerance:

$\pm 0.5$  dB

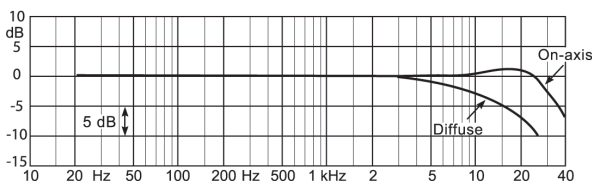
## Phase deviation for kit:

< 5°

## Diagrams

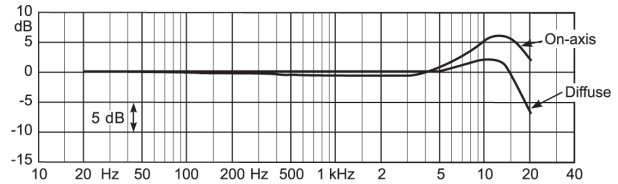
### 4006A, 4006A Omni Microphone

On-axis and diffuse-field responses of DPA 4006A with the pre-mounted, silver Near-field Grid DD0251 fitted



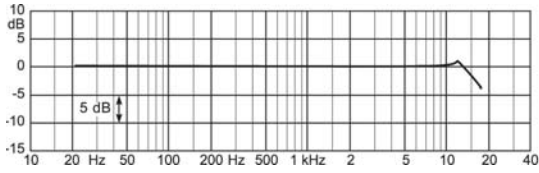
On-axis and diffuse-field responses of DPA 4006A with the pre-mounted, silver Near-field Grid DD0251 fitted

On-axis and diffuse-field responses of DPA 4006A with the black Diffuse-field Grid DD0297 fitted



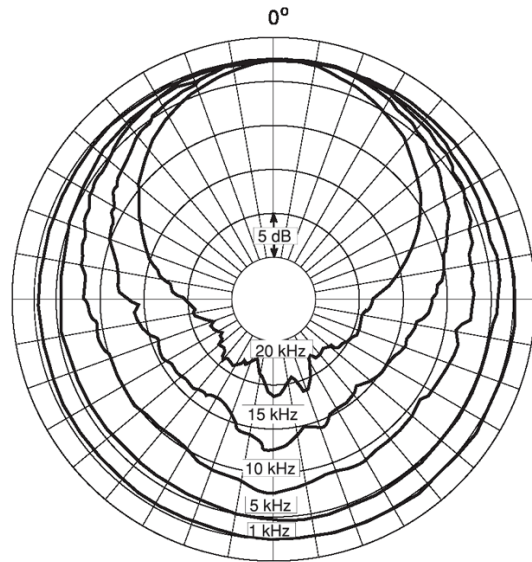
On-axis and diffuse-field responses of DPA 4006A with the black Diffuse-field Grid DD0297 fitted

On-axis response of DPA 4006A with the silver trapezoid Close-miking Grid DD0254

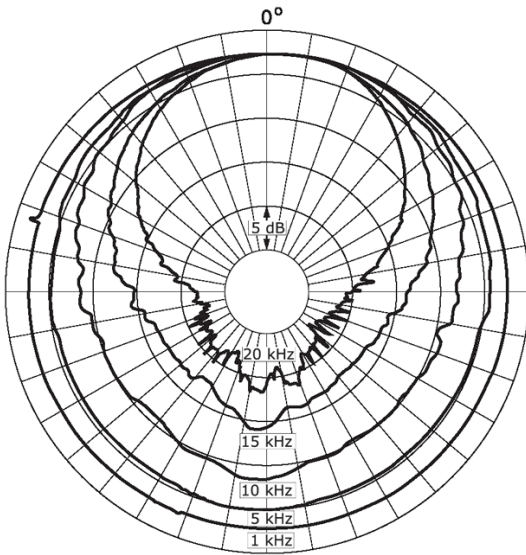


On-axis response of DPA 4006A with the silver trapezoid Close-miking Grid DD0254

Directional characteristics of DPA 4006A with the pre-mounted, silver Free-field Grid DD0251 fitted (normalized)



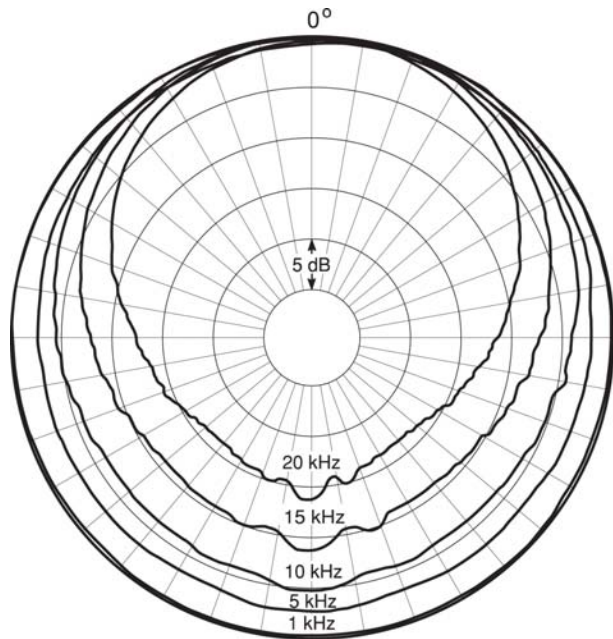
Directional characteristics of DPA 4006A fitted with the black Diffuse-field Grid DD0297 (normalized)



Directional characteristics of DPA 4006A fitted with the black Diffuse-field Grid DD0297 (normalized)

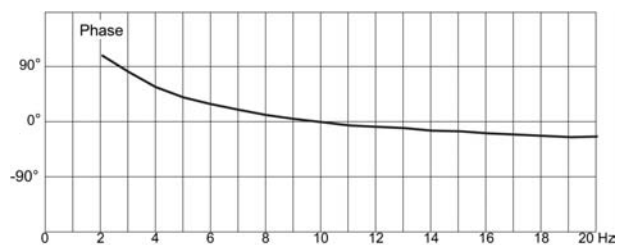
Directional characteristics of DPA 4006A with the pre-mounted, silver Free-field Grid DD0251 fitted (normalized)

Directional characteristics of DPA 4006A with the silver trapezoid Close-miking Grid DD0254



Directional characteristics of DPA 4006A with the silver trapezoid Close-miking Grid DD0254

On-axis phase response of DPA 4006A plotted using a linear frequency axis for evaluation of the phase response



On-axis phase response of DPA 4006A plotted using a linear frequency axis for evaluation of the phase response



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