

# **Product Catalog**



General Program 2013







# DPA Microphones creates products born from a single idea – sonic excellence

In the live concert venue, recording studio, theater, and for film, broadcast, and sports applications, microphones and accessories from the Danish Professional Audio manufacturer, DPA Microphones, are used to perfectly capture the moment. In these high-pressure environments, DPA can be relied on for superior sound and repeatable, dependable results.

# The Source

For any company, excellence grows from the foundation, and we have strong roots. The company originated with Brüel & Kjær, the Danish sound and vibration measurement company respected worldwide for unerring dedication to quality and technical superiority. Since 1992, when DPA created its first product, until now, this standard has been maintained.

DPA products are designed and manufactured on request of sound aficionados.

A superior transducer is accurate both onand off-axis and DPA's microphones are designed with this in mind. Whether it's a singer,
choir, single violin or drum kit; or the roar of
an auto race or rocket launch, DPA can deliver a great-sounding solution. DPA's design
ethic embodies a no-compromise attitude in
the quest for quality. All products are made
on-site at our factory in Denmark, giving us
complete control over all aspects of manufacturing. It's easy to make one good microphone,
but DPA generates great microphones year
after year because it keeps its eye on every
part of the manufacturing process down to
the last screw.

# The Products

Our first products were front-address condenser microphones, but the line has grown with the industry. In this catalog you will find our legacy products as well as miniature microphones for body- and head-worn, boundary and instrument applications, along with handheld, shotgun and surround products. All DPA microphones and adapters are covered by warranty for a minimum of two years, and all microphones with 12 – 24 mm capsules offer a five-year warranty.



DPA provides the industry's best range of supporting products for its microphones. In this catalog you'll find cleverly designed, adjustable microphone mounts for every instrument family; body mounting for theater and live sound; stereo, surround and boompole recording; installation mounts plus many other applications. Connecting to the outside world is another important factor to consider. DPA offers nearly 40 ways to feed miniature mics to other companies' wireless products, field recorders, mixers and more.

# The Trust

When working in the studio, live venue, recording in the field or broadcasting, professionals trust in the performance of DPA microphones to capture the same sound quality time after time. Our commitment to quality means we support our users now and in the future by developing microphone solutions that suit today's and tomorrow's needs.



We not only provide the best sounding microphones, but take great pains to make sure our accessories, carrying cases and packaging make the job of the sound enthusiast an easy one. In the following pages, you'll find what's at the core of DPA's story – we make quality microphone products for passionate performers from the New York Philharmonic to Sting and Metallica.



# **DPA Miniature Microphones**

Miniature microphones and accessories cover a specialized range of products for instrument and voice reproduction for broadcast, live, installation and field applications. Like all DPA products, the emphasis is on quality sound, durability, repeatable results and ease of use.

DPA miniature microphones come in a variety of colors for easy concealment when body- or costume-worn for theater, film and TV. They are grouped by sensitivity and directionality to cover the most challenging applications.

These microphones flourish in high SPL, low SPL, humidity, heat, and dusty conditions where they can be relied upon to deliver high-quality output with pristine detail and low noise.

The variety of mounting options available in DPA miniature kits and accessories lets you place your microphones accurately, easily and stylishly for optimal results. Connections are of utmost importance and our full range of adapters makes it easy to pair DPA microphones with other companies' wireless products, recorders and mixers.



# 4060 Miniature Omnidirectional Microphone, Hi-Sens



# **Key features**

The DPA 4060 series is widely acknowledged as the world's leading miniature microphone for speech and vocal performance applications even in humid conditions. Designed for use with wireless systems in theater, television and film, the capsule is highly unobtrusive and offers excellent vocal detail and resolution. The 4060 features low noise and high sensitivity and comes with a wide range of accessories, connectors and adapters.

# **Specifications**

# Directional characteristics:

Omnidirectional

# Frequency range, ± 2 dB:

Soft boost grid: 20 Hz - 20 kHz, 3 dB soft boost at 8 - 20 kHz. High boost grid: 20 Hz - 20 kHz, 10 dB boost at 12 kHz.

# Sensitivity, nominal, ±3 dB at I kHz:

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

# Equivalent noise level, A-weighted:

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

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

71 dB(A)

# Dynamic range:

Typ. 100 dB

#### Max. SPL, peak before clipping:

134 dB

#### Power supply:

For wireless systems: Min. 5 V through DPA adapter: With DAD6001-BC/ DAD6024/DAD4099-BC: 48 V phantom power ±4 V for full performance.

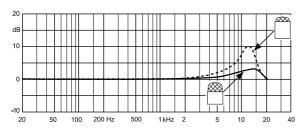
# Connector:

MicroDot

# Cable length:

1.8 m (5.9 ft)

# **Frequency Response**



Dotted line is with high boost grid and solid line with soft boost grid.

#### Order numbers



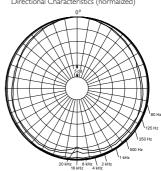
4060-BM

4060-CM

4060-WM

#### Polar Pattern

Directional Characteristics (normalized)



# 4061 Miniature Omnidirectional Microphone, Lo-Sens



# **Key features**

The DPA 4061 is a variant of the 4060 with 10 dB sensitivity attenuation and 10 dB higher SPL handling. The 4061 handles up to 144 dB SPL before clipping – perfect for close-miking singers or instruments at high SPL levels.

It has a linear and natural response making it easy to hear the original sound character on any source and comes with high-boost and soft-boost protection grids which alters the frequency response, accentuating high frequencies.

# **Specifications**

# **Directional characteristics:**

Omnidirectional

# Frequency range, ± 2 dB:

Soft boost grid: 20 Hz - 20 kHz, 3 dB soft boost at 8 - 20 kHz. High boost grid: 20 Hz - 20 kHz, 10 dB boost at 12 kHz.

# Sensitivity, nominal, ±3 dB at I kHz:

6 mV/Pa; -44 dB re. I V/Pa

# Equivalent noise level, A-weighted:

Typ. 26 dB(A) re. 20 µPa (max. 28 dB(A))

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

68 dB(A)

#### Dynamic range:

Typ. 97 dB

# Max. SPL, peak before clipping:

144 dB

#### Power supply:

For wireless systems: Min. 5 V through DPA adapter: With DAD6001-BC/ DAD6024/DAD4099-BC: 48 V phantom power  $\pm 4$  V for full performance.

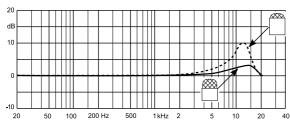
# Connector:

# MicroDot

# Cable length:

1.8 m (5.9 ft)

# **Frequency Response**



Dotted line is with high boost grid and solid line with soft boost grid.

#### Order numbers



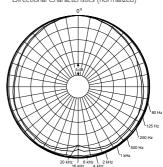
4061-BM

4061-CM

4061-WM

#### Polar Pattern

Directional Characteristics (normalized)



# 4062 Miniature Omnidirectional Microphone, XLo-Sens



# **Key features**

The DPA 4062 is a small, lightweight and easily positioned microphone featuring a natural response plus impressive 154 dB SPL handling. It comes in beige or black and offers windscreens in a variety of colors. The 4062 includes interchangeable capsule protection grids. The high boost grid creates a peak at 12 kHz, while the soft boost grid offers a subtle rise from 8 to 20 kHz.

# **Specifications**

# Directional characteristics:

Omnidirectional

# Frequency range, ± 2 dB:

Soft boost grid: 20 Hz - 20 kHz, 3 dB soft boost at 8 - 20 kHz. High boost grid: 20 Hz - 20 kHz, 10 dB boost at 12 kHz.

# Sensitivity, nominal, ±3 dB at I kHz:

I mV/Pa: -60 dB re. I V/Pa

# Equivalent noise level, A-weighted:

Typ. 33 dB(A) re. 20 µPa (max. 37 dB(A))

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

61 dB(A)

# Dynamic range:

Typ. 90 dB

#### Max. SPL, peak before clipping:

154 dB

#### Power supply:

For wireless systems: Min. 5 V through DPA adapter: With DAD6001-BC/ DAD6024/DAD4099-BC: 48 V phantom power ±4 V for full performance

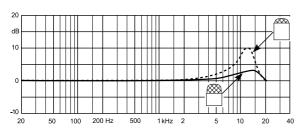
# Connector:

MicroDot

# Cable length:

1.8 m (5.9 ft)

# **Frequency Response**



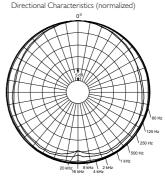
Dotted line is with high boost grid and solid line with soft boost grid.

#### Order numbers





#### Polar Pattern



# 4063 Miniature Omnidirectional Microphone, Lo-Sens & DC



# **Key features**

The DPA 4063 features excellent dynamic handling for close-miking singers or instruments at high levels. Much like the DPA 4060 in character, the 4063 has a linear and natural response that makes it easy to capture

the original sound character of any source. The 4063 is compatible with wireless transmitters offering low voltage power supplies – a common application in most digital systems.

# **Specifications**

# **Directional characteristics:**

Omnidirectional

# Frequency range, ± 2 dB:

Soft boost grid: 20 Hz - 20 kHz, 3 dB soft boost at 8 - 20 kHz. High boost grid: 20 Hz - 20 kHz, 10 dB boost at 12 kHz.

# Sensitivity, nominal, ±3 dB at I kHz:

6 mV/Pa; -44 dB re. I V/Pa

#### Equivalent noise level, A-weighted:

Typ. 26 dB(A) re. 20 µPa (max. 28 dB(A))

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

68 dB(A)

# Dynamic range:

Typ. 97 dB

#### Max. SPL, peak before clipping:

138 dB

#### Power supply:

For wireless systems: Min. 3 V through DPA adapter: With DAD6001-BC/DAD6024/DAD4099-BC: 48 V phantom power  $\pm 4$  V for full performance.

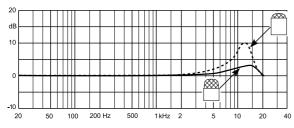
# Connector:

MicroDot

# Cable length:

1.8 m (6 ft)

# **Frequency Response**



Dotted line is with high boost grid and solid line with soft boost grid.

#### Order numbers

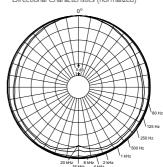


4063-BM

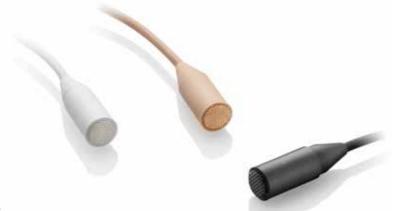


#### Polar Pattern

Directional Characteristics (normalized)



# 4071 Miniature Omnidirectional Microphone, Low-Cut, Presence Boost



# **Key features**

The DPA 4071 offers acoustic pre-equalization with a presence boost making it perfect for chest placement, rather than a free frontal placement. The 4071 comes in black, beige or white and is ideal for ENG/EFP tasks,

teleconferences or other situations without utilizing audio engineers or the ability to equalize electronically. Accessories include the DUA0571 Mesh Windjammer for windy field conditions.

# **Specifications**

# **Directional characteristics:**

Omnidirectional

Frequency range, ± 2 dB:

 $100\ Hz-15\ kHz$  with typ.  $5\ dB$  soft boost at  $4-6\ kHz$ 

Sensitivity, nominal, ±3 dB:

6 mV/Pa ved | kHz; -44.4 dB re. | V/Pa **Equivalent noise level, A-weighted:** 

Typ. 26 dB(A) re. 20 µPa (max. 28 dB(A))

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

68 dB (A)

# Dynamic range:

Typ. 97 dB

Max. SPL, peak before clipping:

144 dB

#### Power supply:

For wireless systems: Min. 5 V through DPA adapter: With DAD6001-BC/ DAD6024/DAD4099-BC: 48 V phantom power  $\pm 4$  V for full performance

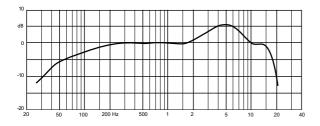
#### Connector:

MicroDot

# Cable length:

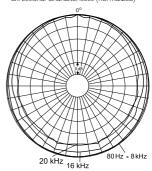
1.8 m (5.9 ft)

# **Frequency Response**



#### Polar Pattern

Directional Characteristics (normalized)



Order numbers

407 I -FM

● 407 I - BM

○ 4071-WM

# 4080 Miniature Cardioid Microphone, Lavalier



# **Key features**

The DPA 4080 is a cardioid clip-on mic with superior offaxis rejection, high sensitivity and a frequency response tailored for maximum speech intelligibility. The unique holder system features a ball mount for easy rotation, plus an integrated shockmount and clip that fits either left or right buttoned shirts.

# **Specifications**

**Directional characteristics:** 

Cardioid

Frequency range, ± 2 dB:

250 Hz - 17 kHz with typ. 4 dB soft boost at 4 - 6 kHz (-5 dB at 100 Hz)

Sensitivity, nominal, ±3 dB at I kHz:

20 mV/Pa; -34 dB re. I V/Pa

Equivalent noise level, A-weighted:

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

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

Typ. 71 dB(A)

# Dynamic range:

Typ. 100 dB

Max. SPL, peak before clipping:

134 dB

#### Power supply:

For wireless systems: Min. 5 V DPA adapter: With DAD6001-BC/DAD6024/

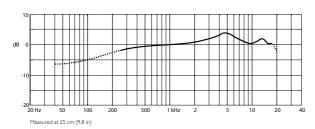
DAD4099-BC: 48 V phantom power ±4 V for full performance.

#### Connector: MicroDot

#### Cable length:

1.2 m (4 ft)

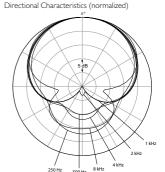
# **Frequency Response**



#### Order number

# 4080-BM

# **Polar Pattern**



# 4081 Miniature Supercardioid Microphone



# **Key features**

The DPA 4081 is a supercardioid miniature microphone perfect for low-profile field recording or instrument miking where superior isolation is needed.

It offers impressive dynamic handling, controlled off-axis frequency and phase response and is available solo or in a closely matched stereo kit that includes a clip and magnetic mounts.

# **Specifications**

# **Directional characteristics:**

Supercardioid

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 at I kHz:

6 mV/Pa; -44 dB re. I V/Pa

Equivalent noise level, A-weighted:

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

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

71 dB

# Dynamic range:

100 dB

Max. SPL, peak before clipping:

142 dB

#### Power supply (for full performance):

Min. 5 V through DPA adapter for wireless systems;

48 V phantom power  $\pm$  4 V with DAD6001-BC XLR adapter

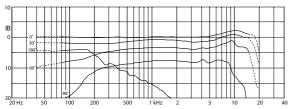
#### Connector:

MicroDot

# Cable length:

2 m (6.6 ft)

# **Frequency Response**



Typical on- and off-axis frequency response of DPA 4081 at 20 cm (7.9 in)

#### Polar Pattern





# 4098H Hanging Supercardioid Microphone



# **Key features**

The DPA 4098H is an outstanding hanging microphone designed for capturing choirs, ensembles and in other venue settings where a low profile and high quality solution is needed. The XLR balanced connection is

robust and provides extremely high rejection of RF interference. Available in both black and white, the 4098H features a gooseneck mount allowing the user to accurately target the microphone at the source.

# **Specifications**

# **Directional characteristics:**

Supercardioid

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

80 Hz to 15 kHz with 3 dB diffuse field boost at 8 to 15 kHz

Sensitivity, nominal ± 3 dB at I kHz:

20 mV/Pa; -34 dB re. I V/Pa

Equivalent noise level, A-weighted:

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

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

71 dB(A)

Dynamic range:

Typ. 100 dB

# Max. SPL, peak before clipping:

134 dB

Cable drive capability:

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

Power supply:

For wireless systems: Min. 5 V through DPA adapter;

with DAD6001-BC: 48 V phantom power ±4 V

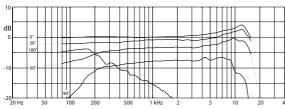
#### Connector:

MicroDot/XLR 3-Pin

# Microphone length:

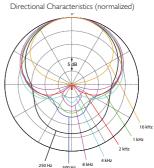
154 mm (6.1 in)

# **Frequency Response**



Typical on- and off-axis frequency response measured at 20 cm (7.9 in)

# **Polar Pattern**



Order numbers

4098HB

098HW

# **EMK4071 ENG/EFP Microphone Kit**



# **Key features**

The DPA EMK4071 features an acoustic preequalization grid making it ideal for ENG/EFP tasks, teleconferences and other situations where outside EQ is not a possibility. The extensive mounting solutions include three different holders, foam windscreens and a mesh windjammer, perfect for integration in various types of clothing even under adverse conditions. See microphone specifications on page 12.

# What's in the box

- I x 407 I Omnidirectional Mic, Presence Boost
- I x DAD6024 Adapter
- I x DMM0002-B Miniature Holder, Double Pin
- I x DMM0006 Miniature Holder, Single Pin

- I x DMM0017-B Miniature Mic Holder
- I x DUA0571 Windjammer for 4071, Grey Fur
- I x DUA0572 Miniature Mesh for 407 I

Foam Windscreens, Color Mix

# FMK4071 Film Microphone Kit



# **Key features**

The DPA FMK4071 is a kit specially designed for film or TV production where low visibility and high quality is essential. The 4071's acoustic pre-equalization grid offers a presence boost designed to compensate for the frequency loss due to chest-mounting or concealment.

Accessories include a miniature windjammer, three tie pods, a miniature mesh windscreen, a miniature concealer, three varieties of double-sided tape, miniature mic tape and a carrying case.

See microphone specifications on page 12.

# What's in the box

- I x 4071 Omnidirectional Mic, Presence Boost
- I x ADH0002 Double-Sided Tape for Miniature Microphones Concealer, 10 pcs.
- I x ADH0004 Double-Sided Mic Tape, 10 pcs.

- I x DMM0009 Miniature Concealer for 407 I
- I x DUA0571 Windjammer for 4071, Grey Fur
- I x DUA0572 Miniature Mesh for 407 I



# IMK4060 Instrument Microphone Kit w. 4060



# **Key features**

The DPA 4060 series features natural sound, low noise, high sensitivity and superior detail and resolution – the perfect instrument mic for low to medium SPL situations. The complete kit comes with a MicroDot to XLR-male

adapter, holders for stringed instruments, universal surface mounts, magnetic mount, foam windscreens, frequency altering protection grids and a storage case.

See microphone specifications on page 8.

# What's in the box

- I x 4060 Omnidirectional Mic, Hi-Sens
- I  $\times$  DAD600 I-BC MicroDot to 3-Pin XLR (P48) w. Belt Clip
- $I \times DMM0002$ -B Miniature Double Pin
- 2 x Microphone Holder for Strings, 5 pcs.

- I x DMM0007 Universal Surface Mount, 5 pcs.
- I x DMM0011-B Magnet Mount
- I x DUA0560 Windscreens, Black, 5 pcs.



# IMK4061 Instrument Microphone Kit w. 4061



# **Key features**

The DPA 4061 series features natural sound, low noise, high sensitivity and superior detail and resolution — the perfect instrument mic for low to medium SPL situations. The 4061 offers the same sonic signature as the 4060, but is better adapted to high SPL applications.

The complete kit comes with a MicroDot to XLR-male adapter, holders for stringed instruments, universal surface mounts, magnetic mount, foam windscreens, frequency altering protection grids and a storage case.

See microphone specifications on page 9.

# What's in the box

- I x 4061 Omnidirectional Mic, Lo-Sens
- I  $\times$  DAD600 I-BC MicroDot to 3-Pin XLR (P48) w. Belt Clip
- $I \times DMM0002$ -B Miniature Double Pin
- 2 x Microphone Holder for Strings, 5 pcs.

- I x DMM0007 Universal Surface Mount, 5 pcs.
- I x DMM0011-B Magnet Mount
- I x DUA0560 Windscreens, Black, 5 pcs.



# LMK4060 Lavalier Microphone Kit w. 4060



# Key features

LMK4060 is a ready-to-go kit containing a DPA 4060 miniature mic, a universal holder and the DAD6001 XLR adapter. Packed in a convenient travelling box, this kit is ideal for those using the 4060 as a lavalier mic for broadcast talent, lecturers and other public speakers. The low-profile appearance and guaranteed distance from the mic to

the wearer's clothing, the holder neutralizes handling noise. The omni pattern offers a broad pickup pattern, no matter which direction the microphone points. The rear cable hook controls cabling run behind clothes. See microphone specifications on page 8.

# What's in the box

- I x 4060 Omnidirectional Micr with 3 m (9.8 ft) Cable
- $I \times DAD6001$ -BC Adapter, MicroDot to 3-Pin XLR (P48) with Belt Clip
- I x DMM0017-B/W Miniature Mic Holder

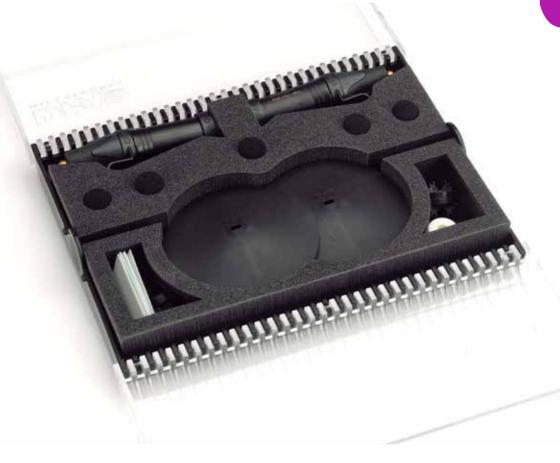
- I x DUA6001 Grid, Soft Boost
- I x DUA6002 Grid, High Boost

Order numbers

■ LMK4060-B



# SMK4060 Stereo Microphone Kit w. 4060



# **Key features**

The SMK4060 microphone kit offers all the great sonic detail and low noise of the 4060 microphone, but comes in selected stereo kits. The kits come with MicroDot to XLR-male adapters, universal surface mounts, magnetic mounts,

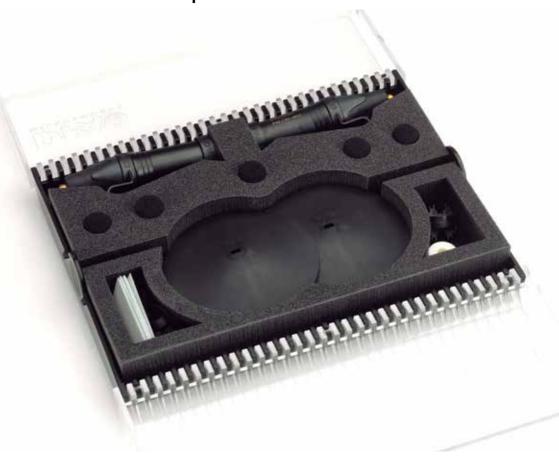
foam windscreens, frequency altering protection grids and a storage case.

See microphone specifications on page 8.

# What's in the box

- 2 x 4060 Omnidirectional Mic, Hi-Sens, Black, 3 m (9.8 ft) Cable
- 2 x BLM6000-B Boundary Layer Mount, Black
- 2 x DAD600 I-BC MicroDot to 3-Pin XLR (P48) w. Belt Clip
- I x DMM0007 Universal Surface Mount, 5 pcs.
- 2 x DMM0011-B Magnet Mount, Black
- I x DUA0560 Windscreen, Black, 5 pcs.

# SMK4061 Stereo Microphone Kit w. 4061



# **Key features**

The SMK4061 microphone kit offers all the great sonic detail and high SPL handling of the 4061 microphone, in selected stereo pairs. The kits come with MicroDot to XLR-male adapters, universal surface mounts, magnetic

mounts, foam windscreens, frequency altering protection grids and a storage case.

See microphone specifications on page 9.

# What's in the box

- $2 \times 4060$  Omnidirectional Mic, Hi-Sens, Black, 3 meter cable
- 2 x BLM6000-B Boundary Layer Mount, Black
- 2 x DAD6001-BC MicroDot to 3-Pin XLR (P48) w. Belt Clip

- I x DMM0007 Universal Surface Mount, 5 pcs.
- 2 x DMM0011-B Magnet Mount, Black
- I x DUA0560 Windscreen, Black, 5 pcs.

# SMK4081 Stereo Microphone Kit w. 4081



# **Key features**

The DPA 4081 is a supercardioid miniature microphone, perfect for low profile field recording or instrument miking where superior isolation is needed. It offers impressive dynamic handling, controlled off-axis frequency and phase

response, all in a stereo kit that includes a clip and magnetic mounts.

See microphone specifications on page 14.

# What's in the box

- 2 x 4081 Supercardioid Miniature Microphone
- 2 x DAD4099-BC XLR-Adapter
- 2 x DMM0016 Magnet Mount

# **BLM4060 Boundary Layer Microphone**



# **Key features**

With a stylish Scandinavian design in stainless steel and black rubber; the BLM4060 is an elegant table microphone solution for any meeting room or conference application. Its omnidirectional polar pattern picks up speech all around it with excellent intelligibility due to its voice opti-

mized frequency response. The boundary layer principle works as an acoustic zoom resulting in a 3 dB, more direct than diffuse sound capture. The BLM4060 comes with an XLR connector. Optionally it may run wirelessly via the DPA adapter program.

# **Specifications**

**Directional characteristics:** 

Omnidirectional, hemisphere Frequency range, ± 2 dB:

Frequency range, ± 2 db:

20 Hz - I4 kHz (with a 7 dB soft boost at 8 kHz)

Sensitivity, nominal, ±3 dB:

20 mV/Pa at 1 kHz; -34 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. I kHz at I Pa (94 dB SPL):

71 dB

# Dynamic range:

100 dB

Max. SPL, peak before clipping:

134 dB

#### Power supply:

For wireless systems: Min. 5 V through DPA adapter.

With DAD6001-BC: 48 V phantom power ±4 V for full performance.

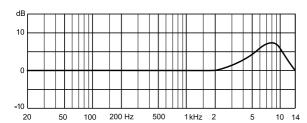
#### Connector:

MicroDot/XLR 3-Pin

# Cable length:

3 m (10 ft)

# **Frequency Response**



Order number

BLM4060

# Notes



# **DPA Headset Microphones**

DPA's headset microphones set the standard for head-worn transducers. They are ideal for singers, public speakers, actors, musicians and broadcast professionals who insist on superior voice reproduction, comfort, easy setup, and a discreet look. The microphones come in several colors, two patterns, several boom designs. The difine headsets are also offered in single- or dual-ear mounts to cover a broad range of applications. The omni headset microphones are for situations where a broad

pickup pattern is essential and off-axis noise is not a problem. The directional versions offer maximum side rejection and excellent sonic focus on the subject. The different ear mounts will fit any head and ear size while the short boom is for louder speakers or situations where the mic needs to be less obtrusive. As with all DPA personal microphone products, a full range of connectors are available for use with wireless systems.





# d:fine™ Single-Ear Omnidirectional Headset Microphone

90 mm Boom or 110 mm Boom



# **Key features**

The d:fine™ omnidirectional single-ear microphone offers accurate, natural voice intelligibility and very high SPL handling making it the perfect choice for use in broadcast, live and conference applications.

Users can adjust the d:fine for left or right ear placement by simply rotating the boom on the single-ear hook. The d:fine mic comes with boom, cable and accessories like foam windscreens and make-up cover.

# **Specifications**

# Directional characteristics:

Omnidirectional

Frequency range, ± 2 dB:

20 Hz - 20 kHz

Sensitivity, nominal, ± 3 dB at 1 kHz:

6 mV/Pa; -44 dB re. I V/Pa

Equivalent noise level, A-weighted:

Typ. 26 dB(A) re. 20 µPa (max. 28 dB(A))

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

Typ. 68 dB(A)

# Dynamic range:

Typ. 97 dB

Max. SPL, peak before clipping:

144 dB

#### Power supply:

Min. 5 V through DPA adapter for wireless systems.

48 V phantom power ± 4 V with DAD600 I-BC XLR adapter.

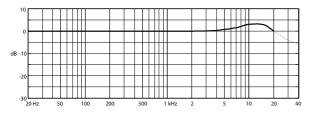
# Connector:

MicroDot

# Cable length:

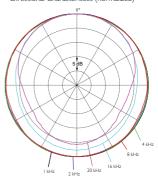
1.3 m (4.3 ft)

# **Frequency Response**



#### Polar Pattern

Directional Characteristics (normalized)



Order numbers (90 mm / 110 mm)



# d:fine $ilde{\ }$ Single-Ear Omnidirectional Headset Microphone

Short 40 mm Boom



# **Key features**

The d:fine™ omnidirectional single-ear headset microphone comes with a short boom for low visibility. Features include high SPL handling, excellent voice intelligibility plus a special make-up and moisture protection cap making it the perfect choice for theater and other live performance applications.

Users can adjust the d:fine for left or right ear placement by simply rotating the boom on the single-ear hook. The d:fine mic comes with boom, cable and accessories like foam windscreens and make-up cover.

# **Specifications**

**Directional characteristics:** 

Omnidirectional

Frequency range, ± 2 dB:

20 Hz - 20 kHz with 3 dB soft boost at 8 - 15 kHz

Sensitivity, nominal, ± 3 dB at 1 kHz:

6 mV/Pa; -44 dB re. I V/Pa

Equivalent noise level, A-weighted:

Typ. 26 dB(A) re. 20 µPa (max. 28 dB(A))

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

Typ. 68 dB(A)

FIOF00-S

FIOB00-S

# Dynamic range:

Typ. 97 dB

Max. SPL, peak before clipping:

144 dB

Power supply:

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

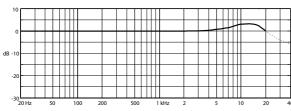
Connector:

MicroDot

Cable length:

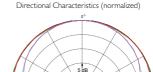
1.3 m (4.3 ft)

# **Frequency Response**



FIOC00-S

# **Polar Pattern**





FIOLLBOO-S



# d:fine™ Dual-Ear Omnidirectional Headset Microphone

90 mm Boom or 110 mm Boom



# **Key features**

The d:fine™ omnidirectional dual-ear headset microphone offers accurate, natural voice intelligibility and very high SPL handling. This microphone is perfect for all applications where sound quality and mobility are required. The flexible headset and dual-ear hooks mean this mic will stay

in position even during vigorous movement. It is easy to change the cable, boom length or color, and the boom from one side to the other. The d:fine mic comes with boom, cable and accessories like foam windscreens and make-up cover.

# **Specifications**

# Directional characteristics:

Omnidirectional

Frequency range, ± 2 dB:

20 Hz - 20 kHz with 3 dB soft boost at 8 - 15 kHz

Sensitivity, nominal, ± 3 dB at 1 kHz:

6 mV/Pa; -44 dB re. | V/Pa

Equivalent noise level, A-weighted:

Typ. 26 dB(A) re. 20 µPa (max. 28 dB(A))

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

Typ. 68 dB(A)

# Dynamic range:

Typ. 97 dB

Max. SPL, peak before clipping:

144 dB

# Power supply:

Min. 5 V through DPA adapter for wireless systems.

48 V phantom power ± 4 V with DAD600 I-BC XLR adapter.

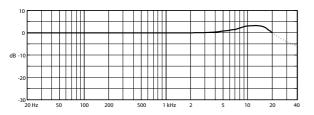
# Connector:

MicroDot

# Cable length:

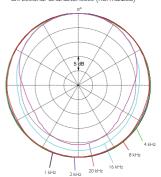
1.3 m (4.3 ft)

# **Frequency Response**



#### Polar Pattern

Directional Characteristics (normalized)



Order numbers (90 mm / 110 mm)

FIOF00-M2 / FIOF00-2

FIOB00-M2 / FIOB00-2

FIOC00-M2 / FIOC00-2 FIOLLB00-M2 / FIOLLB00-2

# d:fine™ Single-Ear Directional Headset Microphone

100 mm Boom or 120 mm Boom



# **Key features**

The d:fine™ directional single-ear headset microphone offers natural voice intelligibility and very high SPL handling. Due to its efficient noise suppression and ease of placement, it is an excellent choice for use in auditoriums or conference rooms with elevated ambient noise. Users

can adjust the diffine for left or right ear placement by simply rotating the boom on the single-ear hook. The diffine mic comes with boom, cable and accessories like foam windscreens and make-up cover.

# **Specifications**

# **Directional characteristics:**

Cardioid

Frequency range, ± 2 dB, near field 2 to 3 cm (0.8 to 1.2 in):

100 Hz - 20 kHz with 3 dB soft boost at 8 - 20 kHz

Sensitivity, nominal, ± 3 dB at 1 kHz:

6 mV/Pa; -44 dB re. I V/Pa

Equivalent noise level, A-weighted:

Typ. 28 dB(A) re. 20 µPa (max. 30 dB(A))

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

Typ. 66 dB(A)

#### Dynamic range:

Typ. 95 dB

Max. SPL, peak before clipping:

144 dB

#### Power supply:

Min. 5 V through DPA adapter for wireless systems. 48 V phantom power  $\pm$  4 V with DAD6001-BC XLR adapter.

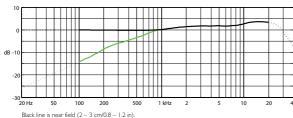
Connector:

MicroDot

# Cable length:

1.3 m (4.3 ft)

# **Frequency Response**



Green line is far field (more than 30 cm/12 in).

Order numbers (100 mm / 120 mm )

FIDF00-M / FIDF00

FIDB00-M / FIDB00

FIDC00-M / FIDC00

# Polar Pattern

5 HB 16 kHz 2 kHz 2 kHz

Directional Characteristics (normalized)

DPA 2013 | 30-31



# d:fine™ Dual-Ear Directional Headset Microphone

Short 100 mm Boom or 120 mm Boom



# **Key features**

The d:fine™ directional dual-ear headset microphone is perfect for stage performance in noisy surroundings. It offers accurate, natural voice intelligibility, suppression of background noise and very high SPL handling. The flexible headset and the dual-ear hooks means this mic will stay in position even during vigorous movement. It is easy to change the cable, boom length or color, and the boom from one side to the other. The d:fine mic comes with boom, cable and accessories like foam windscreens and make-up cover.

# **Specifications**

# Directional characteristics:

Cardioid

Frequency range, ± 2 dB, near field 2 to 3 cm (0.8 to 1.2 in): 100 Hz - 20 kHz with 3 dB soft boost at 8 - 20 kHz

Sensitivity, nominal, ± 3 dB at 1 kHz:

6 mV/Pa; -44 dB re. | V/Pa

Equivalent noise level, A-weighted:

Typ. 28 dB(A) re. 20 µPa (max. 30 dB(A))

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

Typ. 66 dB(A)

#### Dynamic range:

Typ. 95 dB

Max. SPL, peak before clipping:

144 dB

#### Power supply:

Min. 5 V to max. 50 V through DPA adapter for wireless systems. 48 V phantom power ± 4 V with DAD6001-BC XLR adapter.

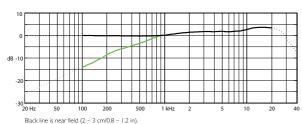
Connector:

MicroDot

Cable length:

1.3 m (4.3 ft)

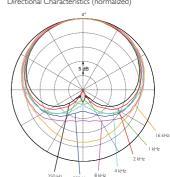
# **Frequency Response**



Green line is far field (more than 30 cm/12 in)

#### Polar Pattern

Directional Characteristics (normalized)



Order numbers (100 mm / 120 mm)

FIDF00-M2 / FIDF00-2

FIDB00-M2 / FIDB00-2

FIDC00-M2 / FIDC00-2 FIDLLB00-M2 / FIDLLB00-2

# 4065 Omnidirectional Headset Microphone



# **Key features**

The DPA 4065 is an omnidirectional headset microphone that provides excellent speech clarity and is specially designed for maximum performance when headworn. It is an excellent choice for stage and studio and often preferred when a special fit for a single user is required.

The headset is easily bent to fit any head shape in a tight, fixed position. The sensitivity is 6 mV/Pa to match the level of the human voice to the general input sensitivity of most wireless transmitters.

# **Specifications**

# Directional characteristics:

Omnidirectional

# Frequency range, ± 2 dB:

Soft boost grid: 20 Hz - 20 kHz, 3 dB soft boost at 8 - 20 kHz. High boost grid: 20 Hz - 20 kHz, 10 dB boost at 12 kHz.

#### Sensitivity, nominal, ±3 dB at I kHz:

6 mV/Pa: -44 dB re. | V/Pa

#### Equivalent noise level, A-weighted:

Typ. 26 dB(A) re. 20 µPa (max. 28 dB(A))

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

68 dB (A)

# Dynamic range:

Typ. 97 dB

# Max. SPL, peak before clipping:

144 dB

#### Power supply:

Min. 5 V to max. 50 V through DPA adapter for wireless systems. 48 V phantom power ± 4 V with DAD6001-BC XLR adapter.

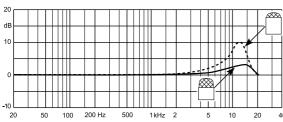
# Connector:

MicroDot

# Cable length:

1.2 m (3.9 ft)

# **Frequency Response**



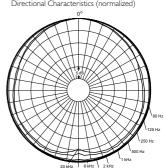
Dotted line is with high boost grid and solid line with soft boost grid.

# Order numbers (left / right)

4065-FL / 4065-FR 4065-BL / 4065-BR

#### Polar Pattern

Directional Characteristics (normalized)



# 4066 Omnidirectional Headset Microphone



# **Key features**

The DPA 4066 is a flexible and easily adjustable omnidirectional headset microphone that offers pristine sound and plenty of headroom. For years this microphone has been the chosen headset mic for broadcasters and on Broadway and West End theaters.

Users can expect reliable operation and consistent quality under rigorous and humid conditions no matter the position of the microphone, which can be mounted on either the right or left side.

# **Specifications**

# Directional characteristics:

Omnidirectional

# Frequency range, ± 2 dB:

Soft boost grid: 20 Hz - 20 kHz, 3 dB soft boost at 8 - 20 kHz. High boost grid: 20 Hz - 20 kHz, 10 dB boost at 12 kHz.

# Sensitivity, nominal, ±3 dB at I kHz:

6 mV/Pa: -44 dB re. | V/Pa

# Equivalent noise level, A-weighted:

Typ. 26 dB(A) re. 20 µPa (max. 28 dB(A))

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

68 dB (A)

# Dynamic range:

Typ. 97 dB

#### Max. SPL, peak before clipping:

144 dB

#### Power supply:

Min. 5 V through DPA adapter for wireless systems.

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

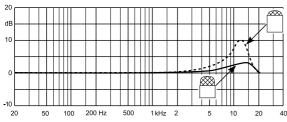
# Connector:

MicroDot

# Cable length:

1.2 m (3.9 t)

# **Frequency Response**



Dotted line is with high boost grid and solid line with soft boost grid.

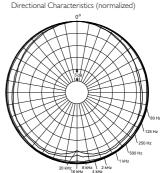
#### Order numbers



4066-B



#### Polar Pattern



# 4067 Omnidirectional Headset Microphone, Lo-Sens & DC



# **Key features**

The DPA 4067 is an omnidirectional headset microphone that is a low DC and extra low sensitivity version of the 4066. The 4067 also offers the same mechanical features, humidity resistance and quick and easy adjustment as the 4066.

Sensitivity is set at ImV/Pa and matches systems that deliver down to a 3 V power supply. When powered correctly, this microphone will be able to handle sound pressure levels up to 154 dB SPL before clipping. The microphone can be mounted on either the right or left side.

# **Specifications**

# Directional characteristics:

Omnidirectional

# Frequency range, ± 2 dB:

Soft boost grid:  $50 \, \text{Hz} - 20 \, \text{kHz}$ ,  $3 \, \text{dB}$  soft boost at  $8 - 20 \, \text{kHz}$ , low-cut -10 dB at 20 Hz. High boost grid: 50 Hz - 20 kHz, 10 dB boost at 12 kHz, low-cut - 10 dB at 20 Hz.

# Sensitivity, nominal, ±3 dB at I kHz:

I mV/Pa; -60 dB re. I V/Pa

#### Equivalent noise level, A-weighted:

Typ. 33 dB(A) re. 20 µPa (max. 37 dB(A))

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

61 dB(A)

#### Dynamic range:

Typ. 90 dB

# Max. SPL, peak before clipping:

154 dB

#### Power supply:

Min. 3 V through DPA adapter for wireless systems. 48 V phantom power ± 4 V with DAD6001-BC XLR adapter.

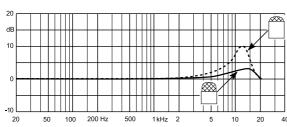
#### Connector:

MicroDot

# Cable length:

1.2 m (3.9 ft)

# **Frequency Response**



Dotted line is with high boost grid and solid line with soft boost grid.

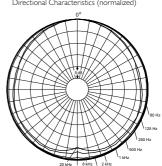
#### Order numbers

# 4067-F

# 4067-B

#### Polar Pattern

Directional Characteristics (normalized)



# 4088 Directional Headset Microphone



# **Key features**

The DPA 4088 is a directional headset microphone offering an open and natural sound making it ideal for both spoken word and vocal performance applications. The 4088 efficiently suppresses distant sound sources making

it perfect for demanding live performance environments where background noise and feedback are concerns. The microphone can be mounted on either the right or left side.

# **Specifications**

# **Directional characteristics:**

Frequency range, ± 2 dB:

100 Hz – 20 kHz (4 – 6 dB soft boost at 15 kHz)

Sensitivity, nominal, ±3 dB at I kHz:

6 mV/Pa; 44 dB re. I V/Pa

Equivalent noise level, A-weighted:

Typ. 26 dB(A) re. 20  $\mu$ Pa (max. 28 dB(A)) S/N ratio, re. I kHz at I Pa (94 dB SPL):

68 dB (A)

Cardioid

# Dynamic range:

Typ. 97 dB

Max. SPL, peak before clipping:

144 dB

#### Power supply:

Min. 5 V to max. 50 V through DPA adapter for wireless systems. 48 V phantom power  $\pm$  4 V with DAD600 I-BC XLR adapter.

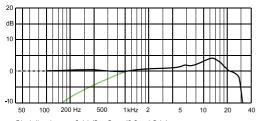
# Connector:

MicroDot

# Cable length:

1.2 m (3.9 ft)

# **Frequency Response**



Black line is near field (2-3 cm/0.8-1.2 in). Green line is far field (more than 30 cm/12 in).

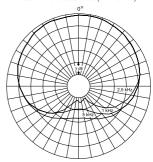
#### Order numbers





#### Polar Pattern

Directional Characteristics (normalized)



# Notes



# **DPA** d:vote<sup>™</sup> 4099 Instrument Mics

DPA's d:vote™ 4099 Instrument Microphones are perfect for low profile, close placement in broadcast and live applications. Low or high SPL is not a problem; the d:vote comes in low or high sensitivity versions for capturing the loudest drum kit or the most subtle nuances of orchestral instruments. The d:vote's supercardioid pattern offers a focused front lobe and superior rear and side rejection for incredible isolation and realism.

The integrated gooseneck, windscreen and connection to various optional mounts makes

the divote 4099 easy to place in tight spaces. These cleverly designed mounts are categorized by letter, suggesting its use for various instrument families. For instance, divote 4099G is for the guitar family, divote 4099V for body mounting on a violin, and the divote 4099P mounts magnetically to the frame of a piano while other instrument mounts and a universal mount cover the rest of the band or orchestra.

Optional connectors are also available for wired or wireless connections.





# d:vote™ 4099B Clip Microphone for Bass



## **Key features**

Perfect for live use, especially for acoustic upright bass, the d:vote™ 4099B captures the instrument more naturally than an internal microphone or pick-up. Capable of handling the double bass's dynamic range and subtle details, the d:vote 4099B features a supercardioid polar pattern for excellent gain-before-feedback. It can easily be

unclipped, moved or mounted with an optional gooseneck extension allowing the mic to be perfectly placed in front of the f-holes of the instrument. The d:vote 4099B uses a standard XLR connector and is also compatible with virtually any wireless system. It is delivered with a heavy-duty 2.2 mm (0.08 in) cable

# **Specifications**

## **Directional characteristics:**

Supercardioid

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 at I kHz:

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. I kHz at I Pa (94 dB SPL):

Typ. 71 dB

## Dynamic range:

Typ. 100 dB

Max. SPL, peak before clipping:

142 dB

#### Power supply:

Min. 5 V through DPA adapter for wireless systems.

48 V phantom power ± 4 V with DAD600 I-BC XLR adapter.

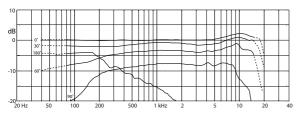
#### Connector:

MicroDot/XLR 3-Pin

#### Cable length:

1.8 m (6 ft)

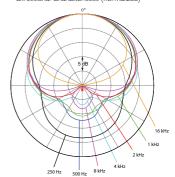
#### **Frequency Response**



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

#### Polar Pattern

Directional Characteristics (normalized)



Order number



# d:vote™ 4099C Clip Microphone for Cello



# **Key features**

Targeted for use with a cello, the d:vote™ 4099C is ideal for PA amplification or live recordings, capturing all the instrument's dynamic range and subtle details. The mic features a linear supercardioid polar pattern for superior gain-before-feedback. The provided gooseneck and an

optional gooseneck extension unit offers stable, flexible and repeatable positioning dvote<sup>TM</sup> 4099C has a thin detachable easy-to-hide cable for more discreet settings. The cable is also available as a heavy duty 2.2 mm (0.08 in) cable for PA/live use.

# **Specifications**

## **Directional characteristics:**

Supercardioid

# 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-BC

#### Sensitivity, nominal, ±3 dB at I kHz:

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

#### Equivalent noise level, A-weighted:

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

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

Typ. 71 dB

## Dynamic range:

Typ. 100 dB

#### Max. SPL, peak before clipping:

142 dB

#### Power supply:

Min. 5 V through DPA adapter for wireless systems. 48 V phantom power  $\pm$  4 V with DAD6001-BC XLR adapter.

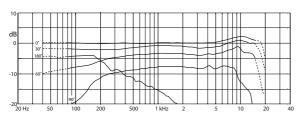
#### Connector:

MicroDot/XLR 3-Pin

#### Cable length:

1.8 m (6 ft)

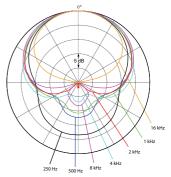
#### **Frequency Response**



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

# Polar Pattern

Directional Characteristics (normalized)



Order number

● VO4099C



# d:vote™ 4099D Clip Microphone for Drum



# **Key features**

Specially designed to be used with instruments providing higher SPL, d:vote™ 4099D offers accurate dynamics and high quality audio capture for drums and percussion instruments. The flexible clip-on system and gooseneck provides fast, stable and repeatable

positioning at different angles. The mic handles an impressive 152 dB SPL while accurately capturing transients and the full sonic range of the instrument. The detachable cable delivered with the d:vote 4099D is a heavy-duty 2.2 mm (0.08 in) cable.

# **Specifications**

## Directional characteristics:

Supercardioid

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 at 1 kHz:

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

Equivalent noise level, A-weighted:

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):

Typ. 66 dB(A)

## Dynamic range:

Typ. 95 dB

Max. SPL, peak before clipping:

152 dB

#### Power supply:

Min. 5 V through DPA adapter for wireless systems.

48 V phantom power ± 4 V with DAD600 I-BC XLR adapter.

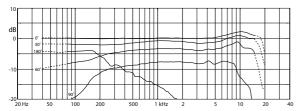
#### Connector:

MicroDot/XLR 3-Pin

#### Cable length:

1.8 m (6 ft)

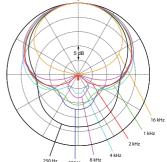
#### **Frequency Response**



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

# Order number ● VO4088D





# d:vote™ 4099G Clip Microphone for Guitar



# **Key features**

Perfect for PA and live recording of acoustic guitar, mandolin, ukulele and dobro, d:vote™ 4099G offers nearly unlimited placement options while capturing the instrument more naturally than an internal microphone or pick-up. The mic fits instruments with a body depth between 35 mm (1.4 in) and 122 mm (4.8 in) and features

a uniform supercardioid polar pattern providing excellent reproduction superior gain-before-feedback. and Compatible with virtually any wireless system, d:vote™ 4099G features an optional gooseneck extension for even more placement options. The d:vote 4099G is delivered with a thin but robust, easy-to-hide cable

## **Specifications**

## Directional characteristics:

Supercardioid

# 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 lowcut filter at 80 Hz with DAD4099-BC

#### Sensitivity, nominal ± 3 dB at 1 kHz:

6 mV/Pa: - 44 dB re. | V/Pa

#### Equivalent noise level, A-weighted:

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

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

Typ. 71 dB

#### Dynamic range:

Typ. 100 dB

#### Max. SPL, peak before clipping:

142 dB

#### Power supply:

Min. 5 V through DPA adapter for wireless systems.

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

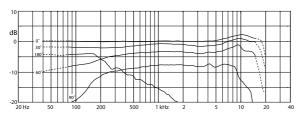
#### Connector:

MicroDot/XLR 3-Pin

#### Cable length:

1.8 m (6 ft)

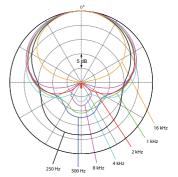
#### **Frequency Response**



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

#### Polar Pattern

Directional Characteristics (normalized)



Order number

VO4099G



# d:vote™ 4099P Stereo Microphone System for Piano



# **Key features**

Targeted for use with a grand piano, the d:vote<sup>™</sup> 4099P makes it easy to achieve a high level of isolation, perfect in closed-lid scenarios in a live setting. The system includes a pair of sensitivity-selected d:vote 4099 microphones on goosenecks with magnetic mounts and offers an optional

gooseneck extension unit. The d:vote 4099P is compatible with virtually any wireless system and comes with thin but robust cables that are easily detachable.

# **Specifications**

## **Directional characteristics:**

Supercardioid

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 at I kHz:

6 mV/Pa; -44 dB re. I V/Pa

Equivalent noise level, A-weighted:

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

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

Typ. 71 dB

Dynamic range:

Typ. 100 dB

#### Max. SPL, peak before clipping:

t142 dB

#### Power supply:

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

#### Connector:

MicroDot/XLR 3-Pin

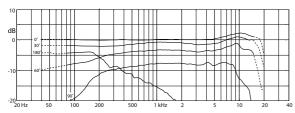
# Cable length:

1.8 (6 ft)

Sensitivity selection tolerance (at I kHz):

+ I dF

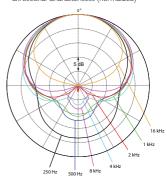
# **Frequency Response**



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

#### Polar Pattern

Directional Characteristics (normalized)



Order number

■ VO4099P



# d:vote<sup>™</sup> 4099S Clip Microphone for Saxophone



## **Key features**

The d:vote™ 4099 microphone and mounting system is specifically designed and optimized for the saxophone family. The d:vote 4099S fits soprano, alto, tenor or baritone saxes providing exceptional gain-before-feedback and a wide range of tonal possibilities. Fully capable of

handling any saxophone's dynamic range and timbre, the mic is compatible with virtually any wireless system. The d:vote 4099S offers an optional gooseneck extension unit and comes with a thin, robust and detachable cable that is easy to conceal.

# **Specifications**

## Directional characteristics:

Supercardioid

# 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-BC

#### Sensitivity, nominal, ±3 dB:

6 mV/Pa; -44 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. I kHz at I Pa (94 dB SPL):

Typ. 71 dB

## Dynamic range:

Typ. 100 dB

#### Max. SPL, peak before clipping:

142 dB

#### Power supply:

Min. 5 V through DPA adapter for wireless systems.

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

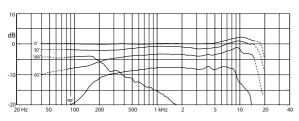
#### Connector:

MicroDot/XLR 3-Pin

#### Cable length:

1.8 m (6 ft)

#### **Frequency Response**



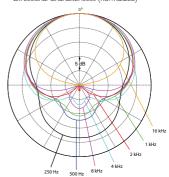
Typical on- and off-axis frequency response of DPA 4099 at 20 cm (7.9 in) distance

#### Order number

VO4099S

#### Polar Pattern

Directional Characteristics (normalized)





# d:vote™ 4099T Clip Microphone for Brass



# **Key features**

An ideal tool for capturing trumpet, trombone and other brass instruments, with or without mute, the d:vote<sup>™</sup> 4099T effortlessly handles even the highest sound pressure levels. It features a supercardioid polar pattern for superior gain-before-feedback, and an easy-to-mount

flexible design offering a wide variety of mounting and placement options. The mic is compatible with virtually any wireless system, offers an optional gooseneck extension unit and comes with a thin and robust detachable cable.

# **Specifications**

#### Directional characteristics:

Supercardioid

# 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-BC

#### Sensitivity, nominal, ±3 dB at I kHz:

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

# Equivalent noise level, A-weighted:

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

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

Typ. 66 dB

#### Dynamic range:

Typ. 95 dB

#### Max. SPL, peak before clipping:

152 dB

## Power supply:

Min. 5 V through DPA adapter for wireless systems.

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

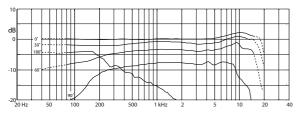
#### Connector:

MicroDot/XLR 3-Pin

#### Microphone length:

45 mm (1.8 in)

#### **Frequency Response**



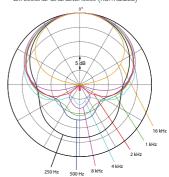
Typical on- and off-axis frequency response of DPA 4099 at 20 cm (7.9 in) distance

#### Order number

■ VO4099T

#### Polar Pattern

Directional Characteristics (normalized)



# d:vote™ 4099U Universal Clip Microphone



# **Key features**

The 4099U is especially designed to address the unique mounting challenges of slim-bodied and unusually shaped instruments. The microphone clip includes a hook-and-loop fastener strap, which allows the holder to fit instruments of varying sizes and diameters such as oboe, clarinet,

bassoon, recorder and flute. The microphone features a supercardioid polar pattern for superior gain-before feedback and is compatible with virtually any wireless system. 4099U features an optional gooseneck extension unit, and is an apt choice for underhead cymbal miking.

# **Specifications**

## **Directional characteristics:**

Supercardioid

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 at I kHz:

6 mV/Pa; -44 dB re. I V/Pa

Equivalent noise level, A-weighted:

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

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

Typ. 71 dB

## Dynamic range:

Typ. 100 dB

Max. SPL, peak before clipping:

142 dB

#### Power supply:

Min. 5 V through DPA adapter for wireless systems.

48 V phantom power  $\pm$  4 V with DAD6001-BC XLR adapter.

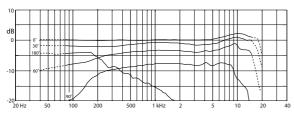
#### Connector:

MicroDot/XLR 3-Pin

#### Cable length:

1.8 m (6 ft)

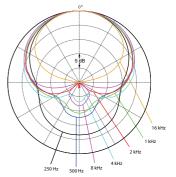
#### **Frequency Response**



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

#### **Polar Pattern**

Directional Characteristics (normalized)



Order number

● VO4099U



# d:vote<sup>™</sup> 4099V Clip Microphone for Violin



# **Key features**

Ideal for the violin, banjo and viola, the d:vote<sup>TM</sup> 4099V fits instruments with a body depth between 35 mm (1.4 in) and 55 mm (2.1 in). The microphone and mounting system is specifically designed and optimized for the string family with a versatile gooseneck providing stable

and repeatable positioning. The mic is compatible with virtually any wireless system and features a supercardioid polar pattern for superior gain-before-feedback. The d:vote 4099V offers an optional gooseneck extension unit and comes with a thin and robust cable.

# **Specifications**

## Directional characteristics:

Supercardioid

# 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 lowcut filter at 80 Hz with DAD4099

#### Sensitivity, nominal, ±3 dB at I kHz:

6 mV/Pa: -44 dB re. | V/Pa

#### Equivalent noise level, A-weighted:

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

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

Typ. 71 dB

#### Dynamic range:

Typ. 100 dB

#### Max. SPL, peak before clipping:

142 dB

#### Power supply:

Min. 5 V through DPA adapter for wireless systems.

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

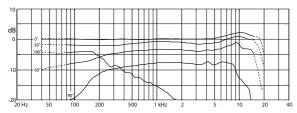
#### Connector:

MicroDot/XLR 3-Pin

#### Cable length:

1.8 m (6 ft)

#### **Frequency Response**



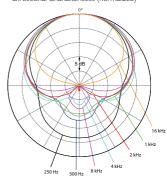
Typical on- and off-axis frequency response of DPA 4099 at 20 cm (7.9 in) distance

#### Order number

# ■ VO4099V

#### Polar Pattern

Directional Characteristics (normalized)



# **Notes**



# DPA d:facto<sup>TM</sup> Vocal Microphones

DPA's special talent for producing mics with visual elegance and technical excellence is demonstrated in the difacto handheld vocal microphone range. The difacto brings the true studio sound to the live stage. Where sound pressure levels are a challenge, the difacto is up to the task with its 160 dB SPL threshold, three-step pop-protection grid and best-in-class low handling noise. The difacto offers excellent sonic reproduction

with all the detail and balanced, linear phase and frequency response users have grown to trust from DPA. This mic defines versatility featuring a supercardioid pattern — perfect for rejecting unwanted rear and side signals. The ingenious adapter system allows for the td:facto to be used on wireless systems like Sony, Lectrosonics, Shure, Wisycom and Sennheiser as well as on the wired DPA handle.





# d:facto™ II Vocal Microphone with DPA Handle, Supercardioid



# **Key features**

With the unique ability to use the same mic head for both wired and wireless use, the difacto II sets a new standard in performance and flexibility among high isolation stage mics. With DPA's pedigree of key features such as extraordinary natural sound, perfectly uniform supercardioid directionality and extreme sound level handling, the d:facto II is equally at home in sound reinforcement and recording applications. The phantom powered DPA handle is a state-of-the-art electronic design with a total transparent sound and SPL handling above 160 dB.

# **Specifications**

## Directional pattern:

Supercardioid

#### Frequency range, ± 2 dB, at 12 cm (4.7 in):

 $100\,Hz$  -  $16\,kHz$  with 3 dB soft boost at 12 kHz. Permanent 3rd order low-cut filter (-3 dB at 80 Hz).

#### Sensitivity, nominal, ± 2 dB at 1 kHz:

5 mV/Pa; -46 dB re. 1 V/Pa

#### Equivalent noise level, A-weighted:

Typ. 19 dB(A) re. 20 µPa (max. 21 dB(A))

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

Typ. 75 dB(A)

#### Dynamic range:

Typ. 120 dB

#### Max. SPL, peak before clipping:

160 dB

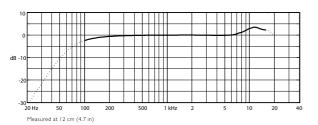
#### Power supply (for full specifications):

48 V Phantom power (± 4 V)

#### Connector:

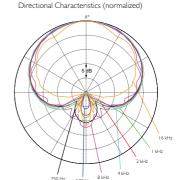
XLR-3M. Pin 1: shield, Pin 2: signal + phase, Pin 3: - phase

#### **Frequency Response**



#### Order number







# d:facto™ II Vocal Microphone with SLI Adapter, Supercardioid

For Shure/Sony/Lectrosonics



# **Key features**

By using original DPA adapters, the difacto II supercardioid mic head can be used with a variety of other transmitting products. The SLI adapter ensures perfect mechanic and electronic fitting to wireless systems from Shure, Sony and Lectrosonics. With unsurpassed capsule perfection, a

three-stage pop-protection grid, perfect shock mounting and an electronic design handling high voltage from the capsule; the d:facto II sounds much more dynamic and distinct than any other wireless, even with entry level systems.

# **Specifications**

(All specifications measured with the DPA d:facto II Handle)

## Directional pattern:

Supercardioid

# Frequency range, ± 2 dB, at 12 cm (4.7 in):

100 Hz - 16 kHz with 3 dB soft boost at 12 kHz.

Permanent 3rd order low-cut filter (-3 dB at 80 Hz).

# Sensitivity, nominal, $\pm$ 2 dB at 1 kHz:

5 mV/Pa; -46 dB re. I V/Pa

# Equivalent noise level, A-weighted:

Typ. 19 dB(A) re. 20 µPa (max. 21 dB(A))

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

Typ. 75 dB(A)

#### Dynamic range:

Typ. 120 dB

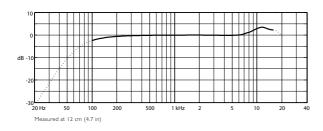
#### Max. SPL, peak before clipping:

160 dB

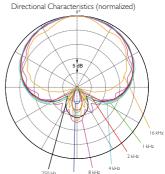
#### Power supply (for full specifications):

48 V Phantom power (± 4 V)

#### Frequency Response



#### **Polar Pattern**



Order number



# d:facto™ II Vocal Microphone with SE2-ew Adapter, Supercardioid

For Sennheiser 2000/9000/evolution wireless



# **Key features**

The SE2-ew adapter ensures perfect mechanic fit and electronic optimization to Sennheiser 2000, 9000, and evolution wireless bodies. The difacto II supercardioid mic head can be used with various transmitters using original DPA adapters. With unsurpassed capsule perfection,

three-stage pop protection grid, perfect shock mounting and electronics handling high voltage from the capsule; the difacto II sounds extremely dynamic and distinct. It is not necessarily set to be a wireless mic, since the adapter can be replaced with the DPA Handle.

**Specifications** (All specifications measured with the DPA d:facto II Handle)

Directional pattern:

Supercardioid

Frequency range, ± 2 dB, at 12 cm (4.7 in):

100~Hz - 16~kHz with 3 dB soft boost at 12 kHz. Permanent 3rd order low-cut filter (-3 dB at 80 Hz).

Sensitivity, nominal, ± 2 dB at 1 kHz:

5 mV/Pa; -46 dB re. I V/Pa

Equivalent noise level, A-weighted:

Typ. 19 dB(A) re. 20  $\mu$ Pa (max. 21 dB(A))

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

Typ. 75 dB(A)

#### Dynamic range:

Typ. 120 dB

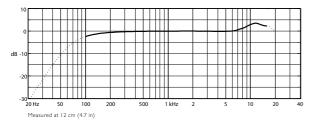
Max. SPL, peak before clipping:

160 dB

Power supply (for full specifications):

48 V Phantom power (± 4 V)

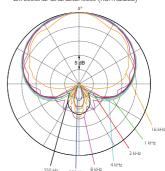
#### **Frequency Response**



#### Order number







# d:facto™ II Vocal Microphone with SE5 Adapter, Supercardioid

For Sennheiser 5000



# **Key features**

The SE5 adapter ensures perfect mechanic fit and electronic optimization to Sennheiser 5000 series wireless bodies. d:facto II supercardioid mic head can be used with various transmitters using original DPA adapters. With unsurpassed capsule perfection, three-stage pop

protection grid, perfect shock mounting and electronics handling high voltage from the capsule; the difacto II sounds extremely dynamic and distinct. It is not necessarily set to be a wireless mic, since the adapter can be replaced with the DPA Handle.

#### **Specifications**

(All specifications measured with the DPA d:facto II Handle)

## Directional pattern:

Supercardioid

# Frequency range, ± 2 dB, at 12 cm (4.7 in):

 $100 \, \text{Hz}$  -  $16 \, \text{kHz}$  with 3 dB soft boost at 12 kHz. Permanent 3rd order low-cut filter (-3 dB at 80 Hz).

## Sensitivity, nominal, ± 2 dB at 1 kHz:

5 mV/Pa; -46 dB re. 1 V/Pa

# Equivalent noise level, A-weighted:

Typ. 19 dB(A) re. 20 µPa (max. 21 dB(A))

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

Typ. 75 dB(A)

#### Dynamic range:

Typ. 120 dB

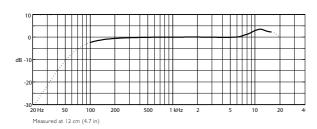
#### Max. SPL, peak before clipping:

160 dB

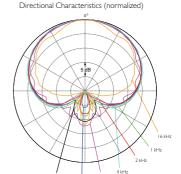
#### Power supply (for full specifications):

48 V Phantom power (± 4 V)

#### Frequency Response



# Order number FA4018VSE5B





# d:facto™ II Vocal Microphone with WI2 Adapter, Supercardioid

For Wisycom



# **Key features**

The d:facto II supercardioid mic head can be used in various transmitting applications with the use of original DPA adapters. The WI2 adapter ensures perfect mechanic and electronic fitting to wireless systems from Wisycom. With unsurpassed capsule perfection, three-stage pop

protection grid, perfect shock mounting and electronics handling high voltage from the capsule; the difacto II sounds extremely dynamic and distinct. It is not necessarily set to be a wireless mic, since the adapter can be replaced with the DPA Handle.

**Specifications** (All specifications measured with the DPA difacto II Handle)

Directional pattern:

Supercardioid

Frequency range, ± 2 dB, at 12 cm (4.7 in):

100 Hz - 16 kHz with 3 dB soft boost at 12 kHz.

Permanent 3rd order low-cut filter (-3 dB at 80 Hz).

Sensitivity, nominal, ± 2 dB at 1 kHz:

5 mV/Pa; -46 dB re. 1 V/Pa

Equivalent noise level, A-weighted:

Typ. 19 dB(A) re. 20 µPa (max. 21 dB(A))

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

Typ. 75 dB(A)

#### Dynamic range:

Typ. 120 dB

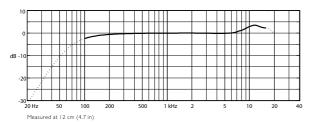
Max. SPL, peak before clipping:

160 dB

Power supply (for full specifications):

48 V Phantom power (± 4 V)

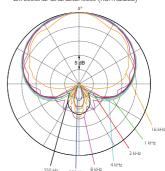
#### Frequency Response



Order number







# d:facto<sup>™</sup>

# d:facto - assembly guide

d:facto™ II Vocal Microphone Order number: FA4018VDPAB



d:facto II Wireless SLI (for Shure/Sony/Lectrosonics)
Order number: FA40185L1B



d:facto II Wireless SE2-ew (for Sennheiser 2000/9000/evolution wirel Order number: FA4018VSE2-ewB



d:facto II Wireless SE5 (for Sennheiser 5000) Order number: FA4018VSE5B



d:facto II Wireless WI2 (for Wisycom) Order number: A4018VWI2B



d:facto II Microphone Grid Order number: DUA0710



Microphone Capsule for Vocal, Supercardioid Order number: MMC4018V



d:facto II Handle

For 48 V phantom Order number: FAADPA2B



d:facto II SLI Adapter for Shure, Sony, Lectrosonics Order number: FAASLIB



d:facto II SE2-ew Adapter heiser 2000, 9000 and evolution Order number: FAASE2-ewB



d:facto II SE5 Adapter Order number: FAASESB



d:facto II WI2 Adapter

for Wisycom Order number: FAAWI2B





# **DPA** d:dicate<sup>TM</sup> Recording Mics

DPA's long history in the art of creating test and measurement products is brought into play in the d:dicate™ Recording Microphones category. This specialized range of microphones feature technical specs that have become the envy of the industry, bringing low noise and pristine accuracy to live, broadcast and studio applications.

The transformerless, electronic circuit cuts no corners offering RF rejection between >60 dB and >40 dB; perfect for long cable runs

while superb off-axis response brings stunning realism to any application.

All DPA mics evolve as we keep up with the most recent developments in materials and electronic circuit design. The latest releases in this category demonstrate this by offering improvements in dynamic range as well as full modularity.



# 2006A Twin Diaphragm Omnidirectional Microphone



# **Key features**

The 2006A was constructed with DPA's classic 4006 microphone in mind. It brings solid DPA quality and performance to a variety of applications, but at a lower price than the legacy mics. It can be bought individually or as a matched pair (ST2006A) for stereo use. It's a microphone you can grow with.

The 2006A offers interchangeable capsules and preamps making it a versatile performer for studio, stage and live use. The "A" refers to the preamp which is DPA's highest end, audiophile quality mic body. A foam windscreen and microphone clip are included.

# **Specifications**

Omnidirectional

Frequency range:

20 Hz to 20 kHz

Sensitivity, nominal,  $\pm$  2 dB at 1 kHz:

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

Equivalent noise level, A-weighted:

Typ. 16 dB(A) re. 20  $\mu$ Pa (max. 18 dB(A))

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

Typ. 78 dB(A)

# Dynamic range:

Typ. 114 dB

Max. SPL, peak before clipping:

141 dB

Switchable attenuator:

0 dB / -20 dB

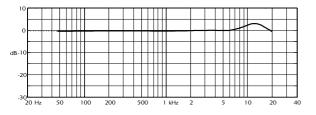
Power supply:

48 V Phantom power (± 4 V)

#### Connector:

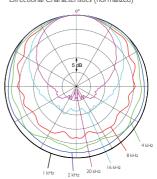
XLR-3M. Pin 1: shield, Pin 2: signal + phase, Pin 3: - phase

#### **Frequency Response**



#### Polar Pattern

Directional Characteristics (normalized)



Order number

2006A

# 2006C Twin Diaphragm Omnidirectional Microphone, Compact



# **Key features**

The 2006C has a unique design using two, opposite facing miniature capsules in the same housing. This hybrid construction combines the fast impulse response and large frequency bandwidth of small capsules with lower self-noise achieved from a larger diaphragm. Its compact

size and unique mounting accessories make it perfect for close-miking of acoustic piano, guitar, wind instruments and choirs. A foam windscreen and microphone clip are included.

# **Specifications**

## Directional pattern:

Omnidirectional

#### Frequency range:

20 Hz to 20 kHz

# Sensitivity, nominal, ± 2 dB at 1 kHz:

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

# Equivalent noise level, A-weighted:

Typ. 16 dB(A) re. 20  $\mu$ Pa (max. 18 dB(A))

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

Typ. 78 dB(A)

## Dynamic range:

Typ. 114 dB

#### Max. SPL, peak before clipping:

134 dB

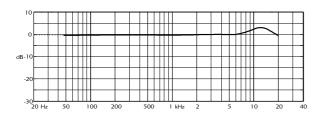
#### Power supply:

48 V Phantom power (± 4 V)

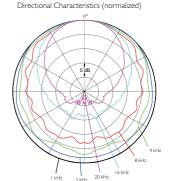
#### Connector:

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

#### Frequency Response



#### Polar Pattern



Order number

2006C

# 2011A Twin Diaphragm Cardioid Microphone



# **Key features**

The 2011A blends clarity, richness and modern design using pre-polarized back plates and directional tubes to give it a unique signature. Compared to our own 4011 reference, the 2011 capsule is intentionally constructed for higher off-axis rejection, providing excellent separation at close quarters. The modular nature of the 2011A allows for future upgrades and pairing with a wide range of other DPA products. A foam windscreen and microphone clip are included.

# **Specifications**

Cardioid

Frequency range:

20 Hz to 20 kHz Sensitivity, nominal, ± 2 dB at 1 kHz:

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

Equivalent noise level, A-weighted:

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

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

Typ. 74 dB(A)

## Dynamic range:

Typ. 117 dB

Max. SPL, peak before clipping:

153 dB

Switchable attenuator:

0 dB / -20 dB

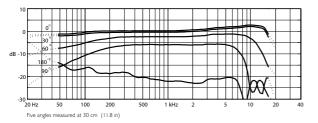
Power supply:

48 V Phantom power (± 4 V)

## Connector:

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

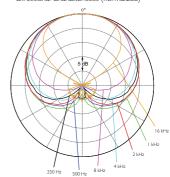
#### **Frequency Response**



#### Order number

# 2011A





# 2011C Twin Diaphragm Cardioid Microphone, Compact



# **Key features**

The compact size of the 2011C makes it easy to place in tight quarters. Its ability to handle high SPL (146 dB) makes it the perfect choice for situations where you have to be confident in your transducer's ability to deliver clean audio in unpredictable surroundings. Like other capsules

in the 2000 series, the 2011 capsule has a unique One-Capsule/Twin-Diaphragm composition with two opposite facing miniature capsules and interference tubes to control directivity and frequency response.

A foam windscreen and microphone clip are included.

# **Specifications**

Directional	pattern:
-------------	----------

Cardioid

Frequency range:

20 Hz to 20 kHz

Sensitivity, nominal, ± 2 dB at I kHz:

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

Equivalent noise level, A-weighted:

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

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

Typ. 74 dB(A)

## Dynamic range:

Typ. 117 dB

Max. SPL, peak before clipping:

146 dB

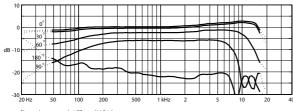
Power supply:

48 V Phantom power (± 4 V)

# Connector:

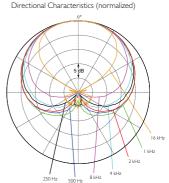
XLR-3M. Pin 1: shield, Pin 2: signal + phase, Pin 3: - phase

#### Frequency Response



Five angles measured at 30 cm (11.8 in)

# Polar Pattern



Order number

● 2011C

# **4006A Omnidirectional Microphone**



# **Key features**

There is no other omni mic in the world as lauded as DPA's 4006A. Its on- and off- axis performance and impressive definition across the entire frequency range gives it a superior neutral character. With the selection of different acoustic modification accessories, grids and pressure equalizers, the 4006A can sonically change behavior without adding noise or distortion.

A foam windscreen and microphone clip are included.

# **Specifications**

Directional characteristics:

Omnidirectional Frequency range:

10 Hz to 20 kHz

Sensitivity, nominal, ±2 dB at 250 Hz:

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

Equivalent noise level, A-weighted:

Typ. 15 dB(A) re. 20 µPa (max. 17 dB(A))

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

Typ. 79 dB(A)

## Dynamic range:

Typ. 124 dB

Max. SPL, peak before clipping:

Switchable attenuator:

0 dB / -20 dB

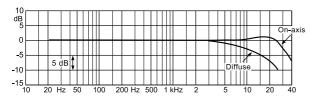
Power supply:

48 V Phantom power (± 4 V)

## Connector:

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

## **Frequency Response**

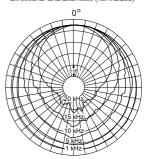


On-axis and diffuse-field frequency responses with pre-mounted Near-field Grid DD0251 fitted

# Order number 4006A

#### Polar Pattern

Directional Characteristics (normalized)



Measured with pre-mounted Free-field Grid DD0251 fitted

# 4006C Omnidirectional Microphone, Compact



## **Key features**

4006C is a small, lightweight, inconspicuous microphone for high-quality recording. Its compact design and clean, transparent sound offers engineers, broadcasters and musicians natural and precise reproduction across a variety of applications. Apart from being ideal for

fixed, suspended or concealed installations such as A-B stereo pairs for symphonic concert hall recordings, the 4006C also excels for close-miking instruments like grand piano, guitar, double bass and percussion.

A foam windscreen and microphone clip are included.

# **Specifications**

## **Directional characteristics:**

Omnidirectional

#### Frequency range:

10 Hz to 20 kHz

#### Sensitivity, nominal ±2 dB at 250 Hz:

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

# Equivalent noise level, A-weighted:

Typ. 15 dB(A) re. 20 µPa (max. 17 dB(A))

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

Typ. 79 dB(A)

#### Dynamic range:

Typ. 119 dB

#### Max. SPL, peak before clipping:

140 dB

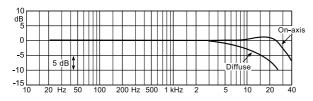
# Power supply:

48 V Phantom power (± 4 V)

#### Connector:

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

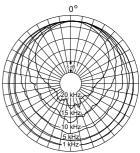
#### **Frequency Response**



On-axis and diffuse-field frequency responses with pre-mounted Near-field Grid DD0251 fitted

#### **Polar Pattern**

Directional Characteristics (normalized)



Order number



# **4011A Cardioid Microphone**



# **Key features**

The legendary 4011A is a clean-sounding, colorless, cardioid pattern mic that promises faithful and distortion-free reproduction within an extremely large dynamic range. Its linear frequency and phase response from all off-axis angles makes it perfect for situations where isolation is

needed, but clarity is a must. If things get too hot, a 20 dB attenuation pad may be applied to avoid overloading the following input stage.

A foam windscreen and microphone clip are included.

# **Specifications**

**Directional characteristics:** 

Cardioid

Frequency range:

20 Hz to 20 kHz

Sensitivity, nominal ±2 dB at 1 kHz:

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

Equivalent noise level, A-weighted, re. 20 µPa:

Typ. 18 dB(A) re. 20 µPa (max. 20 dB)

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

Typ. 76 dB(A)

## Dynamic range:

Typ. 121 dB

Max. SPL, peak before clipping:

159 dB

Switchable attenuator:

0 dB / -20 dB

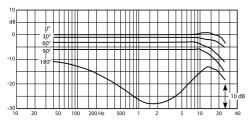
Power supply:

48 V Phantom power (± 4 V)

Connector:

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

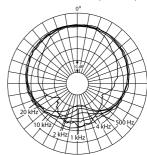
#### **Frequency Response**



Typical on- and off-axis measured at 30 cm (11.8 in)

#### Polar Pattern

Directional Characteristics (normalized)



Order number

4011A

# 4011C Cardioid Microphone, Compact



# **Key features**

Stunning clarity and impressive sonic reproduction is not solely achieved with full-sized studio microphones. DPA's MMP-C preamp paired with the first-order cardioid pattern of the 4011 minimizes bleed from other sources while giving the user the ability to place the mic in tight, low profile situations.

The matte black finish reduces light reflections from stage or studio spots and the accessory line is impressive offering stereo bars, magnet mounts, goosenecks and more.

A foam windscreen and microphone clip are included.

# **Specifications**

Directional characteristics:		
Cardioid		
Frequency range:		
20 Hz to 20 kHz		
Sensitivity, nominal ± 2 dB at 1 kHz:		
10 mV/Pa; -40 dB re. 1 V/Pa		
Equivalent noise level, A-weighted:		
Typ. 18 dB(A) re. 20 µPa (max. 20 dB)		
S/N ratio (A-weighted), re. I kHz at I Pa (94 dB SPL):		
Typ. 76 dB(A)		

## Dynamic range:

Typ. 121 dB

Max. SPL, peak before clipping:

152 dB

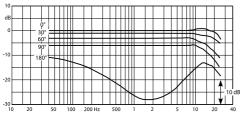
Power supply:

48 V Phantom power (± 4 V)

# Connector:

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

## **Frequency Response**



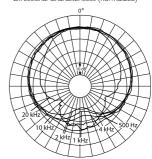
Typical on- and off-axis measured at 30 cm (11.8 in)

# Order number



#### **Polar Pattern**

Directional Characteristics (normalized)



# 4015A Wide Cardioid Microphone



# **Key features**

The 4015A is a versatile performer excelling as an orchestral spot mic, room mic, or for grand piano, percussion or studio vocals. Its wide cardioid design offers a brilliant combination of two polar patterns offering more directionality than an omni, while providing a wider than

cardioid front end. The perfect linear frequency response on- and off-axis plus the wide dynamic range make this versatile microphone perfect for close, mid and far placement. A foam windscreen and microphone clip are included.

## **Specifications**

**Directional characteristics:** 

Wide cardioid

Frequency range:

20 Hz to 20 kHz

Sensitivity, nominal ± 2 dB at I kHz:

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

Equivalent noise level, A-weighted:

Typ. 18 dB(A) re. 20 μPa (max. 20 dB)

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

Typ. 76 dB(A)

## Dynamic range:

Typ. 121 dB

Max. SPL, peak before clipping:

159 dB

Switchable attenuator:

0 dB / -20 dB

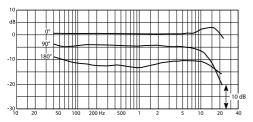
Power supply:

48 V Phantom power (± 4 V)

Connector:

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

#### **Frequency Response**



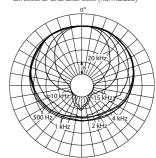
On- and off-axis frequency responses measured at 60 cm (23.6 in)

#### Order number

■ 4015A

#### Polar Pattern

Directional Characteristics (normalized)



# 4015C Wide Cardioid Microphone, Compact



## **Key features**

Visually discreet, the 4015C wide cardioid microphone represents the perfect low-profile solution for audio engineers and set designers. While a first order cardioid has 6 dB rejection to the sides and more than 20 dB to the rear, a wide cardioid has just 3 dB side and 10 dB rear suppression. This makes the 4015C the perfect

middle ground between an omni and a cardioid capsule. A complete range of mounting accessories and stereo bars make this mic an excellent choice for stage, live and broadcast applications where inconspicuous placement and sonic excellence must be maintained.

A foam windscreen and microphone clip are included.

## **Specifications**

**Directional characteristics:**Wide cardioid

Frequency range:

20 Hz to 20 kHz

Sensitivity, nominal ± 2 dB at 1 kHz:

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

Equivalent noise level, A-weighted:

Typ. 18 dB(A) re. 20 µPa (max. 20 dB)

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

Typ. 76 dB(A)

#### Dynamic range:

Typ. 121 dB

Max. SPL, peak before clipping:

152 dB

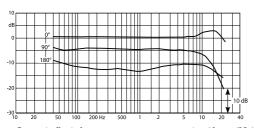
Power supply:

48 V Phantom power (± 4 V)

#### Connector:

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

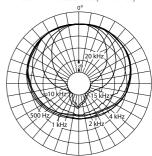
#### **Frequency Response**



On- and off-axis frequency responses measured at 60 cm (23.6

#### **Polar Pattern**

Directional Characteristics (normalized)



Order number



# 4017B Shotgun Microphone



# **Key features**

The light weight (70 g/2.4 oz) and short body (21 cm/8.3") makes the 4017B a groundbreaking shotgun microphone. This mic's unique directional pattern is useful when wanting exceptionally high directivity while rejecting

background noise or when the microphone can not be placed close enough. The MMP-B preamp is an option for use with easily accessible high boost and low cut switches. A foam windscreen and microphone clip are included.

# **Specifications**

## **Directional characteristics:**

Supercardioid, lobe-shaped

Frequency range:

20 Hz to 20 kHz

Sensitivity, nominal  $\pm$  2 dB at 1 kHz:

19 mV/Pa; -34.4 dB re. 1 V/Pa

**Equivalent noise level, A-weighted:** Typ. 14 dB(A) re. 20 µPa (max. 15 dB(A))

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

Typ. 80 dB(A)

## Dynamic range:

Typ. 119 dB

Max. SPL, peak before clipping:

152 dB

#### Filters:

High boost: +4 dB at 8 kHz. Low cut: First order filter, below 120 Hz.

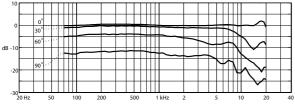
# Power supply:

48 V Phantom power (± 4 V)

## Connector:

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

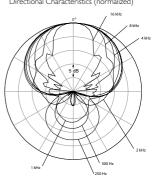
#### **Frequency Response**



On- and off-axis frequency responses measured at 60 cm (23.6 in)

#### Polar Pattern

Directional Characteristics (normalized)



#### Order number

# 4017B-R Shotgun Microphone with Rycote® Windshield



# **Key features**

Providing a complete solution for boom use, the 4017B-R combines the 4017B microphone with a Rycote Windshield and suspension mount developed exclusively for this product. This kit provides everything an outside broadcaster or location mixer could need for clear, directional sound, regardless of the weather and environmental conditions. The 4017B-R offers an inventive switching ring design where both a high-frequency boost and a bass roll-off can be applied.

# **Specifications**

## Directional characteristics:

# Supercardioid, lobe-shaped

Frequency range: 20 Hz to 20 kHz

#### Sensitivity, nominal ± 2 dB at I kHz:

19 mV/Pa; -34.4 dB re. 1 V/Pa

#### Equivalent noise level, A-weighted:

Typ. 14 dB(A) re. 20 µPa (max. 15 dB(A))

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

Typ. 80 dB(A)

## Dynamic range:

Typ. 119 dB

#### Max. SPL, peak before clipping:

152 dB

#### Filters:

High boost: +4 dB at 8 kHz. Low cut: First order filter, below 120 Hz.

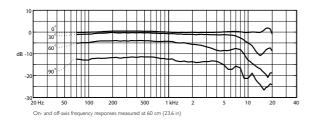
#### Power supply:

48 V Phantom power (± 4 V)

# Connector:

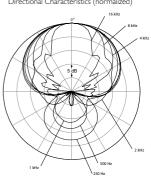
XLR-3M. Pin 1: shield, Pin 2: signal + phase, Pin 3: - phase

#### **Frequency Response**



# Polar Pattern

Directional Characteristics (normalized)



Order number

4017B-R

# ST2006A Stereo Pair with 2006A Omnidirectional



# **Key features**

Sensitivity selected pair and protectively packaged for safe and easy access, the ST2006A stereo kit promises acoustically excellent and authentic AB stereo recording. The microphones are identical within  $\pm 1.5~{\rm dB}$  and can be used with a wide variety of available DPA accessories.

The mics travel in a sturdy Peli® Case with a foam insert allowing for fast and easy exchange of microphones, mounts and accessories.

See microphone specifications on page 60.

## What's in the box

- 2 x 2006A Twin Diaphragm Omni Microphone
- 2 x UA0639 Microphone Clip
- 2 x DUA0020 Foam Windscreen for 2006A/2011A/4006A/4011A/4015A

Order number

■ ST2006A

## ST2006C Stereo Pair with 2006C Compact Omnidirectional



## **Key features**

The DPA d:dicate Recording Mics are known for uncompromising quality and visual elegance. Able to mix with classic architecture and stringent installation requirements, the compact 2006C's can be mounted, hung or concealed while capturing clean, transparent

audio. The mics are closely matched, come in a sturdy travel case and can be combined with other modular DPA capsules, stereo booms, goosenecks, shock or magnet mounts.

See microphone specifications on page 61.

#### What's in the box

- 2 x 2006C Twin Diaphragm Omni Microphone, Compact
- $2\times DUA0020$  Foam Windscreen for 2006C/4006C/4011C/4015C
- 2 x UA0639 Microphone Clip

## ST2011A Stereo Pair with 2011A Cardioids



#### **Key features**

Perfect for live use and recording sessions, the 2011A exhibits a blend of clarity, richness and dynamic range. Compared to its modelled reference, the DPA 4011, the 2011 offers even higher off-axis rejection. Multiple

stereo configurations such as XY and ORTF are easily achieved by pairing the ST2011As with DPA's range of mounting accessories.

See microphone specifications on page 62.

#### What's in the box

- $2 \times 2011A$  Twin Diaphragm Cardioid Microphone
- 2 x UA0639 Microphone Clip for 2011A
- 2 x DUA0028 Foam Windscreen

Order number

■ ST2011A

## ST2011C Stereo Pair with 2011C Compact Cardioids



### **Key features**

Meant to bring DPA's standard of quality to a lower price point, the handpicked cardioid ST2011C microphones are as comfortable around a drum kit as they are capturing a choir or grand piano. The 2011C uses DPA's Twin

Diaphragm capsule providing excellent off-axis response, high SPL handling and can be used with the broad range of DPA mounting accessories.

See microphone specifications on page 63.

#### What's in the box

 $2 \times 2011C$  Twin Diaphragm Cardioid Microphone, Compact

 $2 \times DUA0028$  Foam Windscreen for 2011C

2 x UA0639 Microphone Clip

## ST4006A Stereo Pair with 4006A Omnidirectional



## **Key features**

For reference stereo recording there is no better choice than a DPA 4006A. The ST4006A is a precision, handcrafted and matched pair, identical within  $\pm 0.5$  dB on sensitivity and frequency response. Linear and true in character, the omni patterned, hand-matched pair offers

the truest capture of the stereo soundfield available. The pair comes in a heavy-duty Peli® Case for safe transportation and easy access to the microphones and accessories.

See microphone specifications on page 64.

#### What's in the box

- 2 x 4006A Omni Microphone
- 2 x DD0251 Free-Field Grid, Silver
- $2 \times DD0254$  Close-Miking Grid, Trapezoid, Silver

- 2 x DD0297 Diffuse-Field Grid, Black
- 2 x UA0639 Microphone Clip
- $2\times DUA0020$  Foam Windscreen for 2006A/2011A/4006A/4011A/4015A

## ST4006C Stereo Pair with 4006C Compact Omnidirectional



## **Key features**

When small, lightweight, inconspicuous mics for stereo recording are required, the compact design and transparent sound of the ST4006C is the perfect choice. Due to the MMP-C preamp, the 4006C can be mounted, suspended or concealed while capturing high-quality audio.

The pair exhibits extremely low distortion, a huge dynamic range and linear frequency and phase response. The ST4006C comes in a sturdy Peli® Case with holders, grids and windscreens.

See microphone specifications on page 65.

#### What's in the box

- 2 x 4006C Omni Microphone, Compact
- 2 x DD0251 Free-Field Grid, Silver
- 2 x DD0254 Close-Miking Grid, Trapezoid, Silver

- 2 x DD0297 Diffuse-Field Grid, Black
- 2 x DUA0020 Foam Windscreen for 2006C/4006C/4011C/4015C
- 2 x UA0639 Microphone Clip

## ST4011A Stereo Pair with 4011A Cardioids



### **Key features**

Offered as a closely matched pair, the ST4011A becomes the new standard for stereo pair recording. Originally developed to be the most linear cardioid mic in the world, the 4011A also offers an impressive 159 dB peak handling before clipping. The pair is the

perfect choice for capturing a drum kit, ensemble, string, brass, percussion and piano. Like all d:dicate Recording Microphones, the ST4011A is compatible with the broad range of DPA accessories and mounts.

See microphone specifications on page 66.

#### What's in the box

2 x 40 I I A Cardioid Microphone

2 x UA0639 Microphone Clip

2 x DUA0020 Foam Windscreen for 2006A/2011A/4006A/4011A/4015A

## ST4011C Stereo Pair with 4011C Compact Cardioids



#### **Key features**

DPA's ST4011C is widely recognized as the first choice for close-miking a grand piano. The meticulously matched pair can be used with straightforward magnet and shock mounting accessories, perfect for open or closed lid

applications. Delivered in a sturdy Peli® Case, the pair and body can be easily swapped with other DPA d:dicate capsules and preamps.

See microphone specifications on page 67.

#### What's in the box

- 2 x 4011C Cardioid Microphone, Compact
- $2 \times DUA0020$  Foam Windscreen for 2006C/4006C/4011C/4015C
- 2 x UA0639 Microphone Clip

## ST4015A Stereo Pair with 4015A Wide Cardioids



### **Key features**

Recording orchestras, quartets or ensembles always requires blending the room with more precise, close-miked localization. The ST4015A's wide cardioid pattern offers a greater angle of front coverage and is an excellent

stereo pair for placement in the close, mid or far field. The closely matched pair works with a wide range of DPA accessories for easy and repeatable stereo placement. See microphone specifications on page 68.

#### What's in the box

2 x 40 I 5 A Wide Cardioid Microphone

2 x UA0639 Microphone Clip

2 x DUA0020 Foam Windscreen for 2006A/2011A/4006A/4011A/4015A

## ST4015C Stereo Pair with 4015C Compact Wide Cardioids



### **Key features**

The generously wide polar pattern of the MMC4015 capsule paired with the compact MMP-C preamp combines a broader sound field with a compact profile for tight and concealed placement. As with all DPA

didicate Recording Microphones, the pair works with a broad range of accessories for use in the studio, on stage or in live applications.

See microphone specifications on page 69.

#### What's in the box

- 2 x 4015C Wide Cardioid Mic, Compact
- $2 \times DUA0020$  Foam Windscreen for 2006C/4006C/4011C/4015C
- 2 x UA0639 Microphone Clip

## 3506A Stereo Kit with 4006A Omnidirectional



#### **Key features**

3506A is a complete 4006A stereo kit with two carefully factory-matched phantom powered omni condensers. The specially selected 4006As are matched within  $\pm$  0.5 dB on both frequency range, sensitivity and self noise.

The high sensitivity, low noise-floor and extremely linear frequency response of the microphone pair makes the 3506A the perfect choice for all professional A-B stereo recordings.

See microphone specifications on page 64.

#### What's in the box

- 2 x 4006A Omni Microphone
- 2 x APE30RS Acoustic Pressure Equalizer, 30 mm Ball
- 2 x APE40RS Acoustic Pressure Equalizer, 40 mm Ball
- 2 x APE50RS Acoustic Pressure Equalizer, 50 mm Ball
- 2 x DD025 | Free-Field Grid, Silver
- 2 x DD0254 Close-Miking Grid, Trapezoid, Silver

- 2 x DD0297 Diffuse-Field Grid, Black
- 2 x UA0777 Nose Cone
- $2\times \text{UA0896}$  Foam Windscreen for 2006C/4006C/4011/4015C
- 2 x UA0639 Microphone Clip
- I x UA0836 Stereo Boom with Holders

## 3511A Stereo Kit with 4011A Cardioids



#### **Key features**

3511A is a complete stereo kit with two 4011A cardioid microphones, carefully matched within 2 dB on frequency response, sensitivity and self-noise. These cardioids are exceptionally linear in their frequency response - also off axis. Several standard set-ups such as ORTF and XY

are possible. The  $40\,\mathrm{I\,IAs}$  handle very high SPL and will therefore allow close-miking as well as more distant placement. They are often used for piano recordings of jazz or pop or as overheads for drums.

See microphone specifications on page 66.

#### What's in the box

- $2 \times 401$  I.A Cardioid Microphone
- 2 x UA0897 Shock Mount
- 2 x UA0896 Foam Windscreen for 2006C/4006C/4011/4015C
- 2 x UA0961 Microphone Holder
- I x DUA0019 Spacer for Stereo Boom
- I x UA0836 Stereo Boom with Holders

# **DPA Surround Solutions**

DPA specializes in products targeted at surround recording for film, live, broadcast and studio applications. The lightweight and visually low-profile DPA 5100 surround microphone provides a turnkey 5.1 surround solution that can be handheld for field use, stand mounted for recording or flown by wire in a venue. Where individual mics are needed in a

surround setting, DPA omni, cardioid and wide cardioid microphones can be bought as surround kits. Artfully packaged for safety and easy transport, these kits come in five microphone sets precisely matched within I dB for sensitivity, and frequency response. For higher order surround just add another kit or individual microphones.



## 5006A Surround Kit with 4006A Omnis



#### **Key features**

For surround reproduction, the 5006A's identical 4006A omni microphones create a coherent and stable image that perfectly mirrors a room's geometry. The 5006A Surround Kit's natural sound, high sensitivity, low noise-floor and linear frequency response make it the perfect choice for main array recordings.

The kit is compatible with a range of stereo, Decca Tree, surround and other mounts as well as DPA's UA0777 Nose Cone grid for counteracting the directional characteristics that omni mics exhibit at higher frequencies. See microphone specifications on page 64.

## Matching specs for 4006A

### Matching tolerance:

± 0.5 dB

#### Phase deviation:

< 5°

#### What's in the box

- 5 x 4006A Omni Microphone
- 5 x DD0251 Free-Field Grid, Silver
- 5 x DD0254 Close-Miking Grid, Trapezoid, Silver

- 5 x DD0297 Diffuse-Field Grid, Black
- $5 \times \text{UA0639}$  Microphone Clip
- 5 x DUA0020 Foam Windscreen for 2006A/2011A/4006A/4011A/4015A

## 5006-11A Surround Kit with 4006A Omnis and 4011A Cardioids



#### **Key features**

Specifically designed for use in a Decca Tree and stereo array, the DPA 5006-11A surround kit offers three omnidirectional 4006A classics for the front and two 4011A cardioids for the rear channels. With the use of the DPA Acoustic Pressure Equalizers the 4006A mics

can be sonically altered to exhibit different spatial and spectral preferences. The group works with a range of DPA shock mounts, Decca Tree and stereo mounts. See microphone specifications on pages 64 and 66.

## Matching specs for 4006AMatching specs for 4011A

# Matching tolerance: ± 0.5 dB

#### Phase deviation:

< 5°

#### Matching tolerance:

± I dB

#### Phase deviation:

< 10°

#### What's in the box

- 3 x 4006A Omni Microphone
- 2 x 40 I I A Cardioid Microphone
- 3 x DD025 I Free-Field Grid, Silver
- 3 x DD0254 Close-Miking Grid, Trapezoid, Silver

- 3 x DD0297 Diffuse-Field Grid, Black
- 5 x UA0639 Microphone Clip
- 5 x DUA0020 Foam Windscreen for 2006A/2011A/4006A/4011A/4015A

## 5015A Surround Kit with 4015A Wide Cardioids



### **Key features**

The five closely matched 4015A wide cardioids offered in the 5015A Surround Kit produces a spacious surround field with precise localization. The delicate sonic character of the 4015A suits a wide array of genres for music recording or may also serve as a high-quality, venue/audience array. As with all DPA surround kits, the mics are compatible with a full range of mounting solutions.

See microphone specifications on page 68.

### Matching specs for 4015A

#### Matching tolerance:

 $\pm$  I dB

#### Phase deviation:

< 10°

#### What's in the box

 $5 \times 4015 A$  Wide Cardioid Microphone

5 x UA0639 Microphone Clip

5 x DUA0020 Foam Windscreen for 2006A/2011A/4006A/4011A/4015A

Order number

● 5015A

## **5100 Mobile Surround Microphone**



### **Key features**

Perfect for mounting in or outside a venue or for boom use in all conditions, the DPA 5100 delivers 5.1 analog output without the need of any external signal processing. Equally comfortable for use in live sporting events and for film and TV production sound, the 5100 plug-and-play approach relies on DPA's DiPMic™ construction and the use of acoustic chambers to accurately capture the surround field. The 5100 uses a sturdy Lemo output connector and comes with a Mogami, 6-channel XLR breakout cable, a thread adapter and an outdoor cover.

## **Specifications**

#### Directional characteristics:

Directional

#### Frequency range:

L, C, R, LS, RS: 20 Hz to 20 kHz; LFE: 20 Hz to 120 Hz

#### Sensitivity, nominal, ± 3 dB at 1 kHz:

L, C, R: 26 mV/Pa; LS, RS: 28 mV/Pa

### Equivalent noise level, A-weighted:

L, C, R: Typ. 18 dB(A) re. 20 μPa (max. 21 dB(A)) LS, RS: Typ. 20 dB(A) re. 20 µPa (max. 23 dB(A))

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

L, C, R: Typ. 76 dB(A); LS, RS: Typ. 74 dB(A)

#### Dynamic range:

L, C, R, LS, RS: 103 dB; LFE: 100 dB

#### Max. SPL, peak before clipping:

132 dB

#### Power supply:

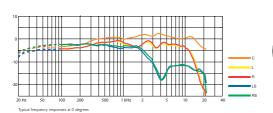
48 V Phantom power

#### Connector: Lemo multipin

#### Cable length:

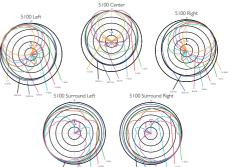
5 m (16.4 ft)

#### **Frequency Response**



#### Polar Pattern

Directional Characteristics (normalized)



Order number

5100

# **Other DPA Microphones**

This range of microphones features several of our capsules, excelling across a range of recording applications as well as test and measurement uses. The larger capsule microphones are preferred for vocals, ensemble and orchestral recording or for close recording of highly dynamic sources. Some of the mics in this series come in 48V, phantom-powered versions for use in most set-

tings or high-voltage powering systems which handle up to an incredible 168 dB SPL before distortion. The high-voltage microphones also bring an added sonic improvement by holding a direct single ended audiophile output stage. When microphones offering pristine accuracy and high SPL handling ability are needed, these microphones are unparalleled in sonic performance.



## 4003 Omni Microphone, I30 V



### **Key features**

In controlled environments DPA's high-voltage line of microphones is the purist's choice offering higher SPL handling and the separation of audio and power to the mic. The 4003 is the I30V counterpart to DPA's legacy 4006 microphone, using the same capsule and offering

perfect linearity and authentic imaging. The mic promises detailed and natural reproduction plus high sensitivity and low noise floor. A foam windscreen and microphone clip are included.

## **Specifications**

#### **Directional characteristics:**

Omnidirectional

Frequency range, ± 2 dB:

10 Hz - 20 kHz

Sensitivity, nominal, ±2 dB:

40 mV/Pa; -27 dB re. I V/Pa unloaded (at 250 Hz)

Equivalent noise level, A-weighted:

Typ. 15 dB(A) re. 20 µPa (max. 17 dB(A))

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

79 dB

#### Dynamic range:

Typ. 120 dB

Max. SPL, peak before clipping:

154 dB SPL peak (f<4 kHz)

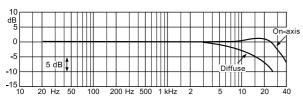
Power supply:

130 V

Connector:

4-pin modified XLR-M (High Voltage)

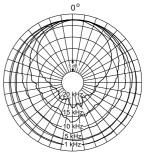
#### **Frequency Response**



On-axis and diffuse-field responses with the Near-field Grid DD0251 fitted

#### Polar Pattern

Directional Characteristics (normalized)



Measured with pre-mounted Free-field Grid DD0251 fitted (normalized)

## 4004 Reference Microphone, I30 V



### **Key features**

The 4004 has an astounding dynamic range of 124 dB from the noise floor to 1% THD and extended headroom of 20 dB up to clipping. The 4004 is acoustically identical to the DPA 4007 reference calibration microphone but

offers a high-voltage powering system and transformerless output. The mic's ability to handle 168 dB SPL makes it unbeatable in its class. A foam windscreen and microphone clip are included.

### **Specifications**

#### **Directional characteristics:**

Omnidirectional

Frequency range, ± 2 dB:

10 Hz - 40 kHz

Sensitivity, nominal, ±2 dB:

10 mV/Pa; -40 dB re. IV/Pa

Equivalent noise level, A-weighted:

Typ. 24 dB(A) re. 20  $\mu$ Pa (max. 26 dB(A)) S/N ratio, re. I kHz at I Pa (94 dB SPL):

70 dB

#### Dynamic range:

Typ. 124 dB

Max. SPL, peak before clipping:

168 dB SPL peak (f<4 kHz)

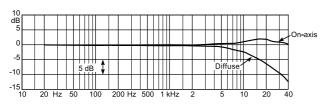
Power supply:

130 V

#### Connector:

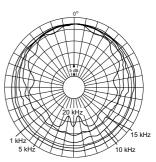
4-pin modified XLR-M (High Voltage)

#### **Frequency Response**



On-axis and diffuse-field responses

#### Polar Pattern





## 4007 Reference Microphone, P48



#### **Key features**

The 4007 is a 48V, high-SPL calibration microphone offering a wide, linear frequency response and transparent signal reproduction. This high-performance condenser has a dynamic range of 124 dB from the noise floor to 1% THD and is capable of handling up to 155 dB SPL before clipping. Due to its linear qualities, the 4007 may be used as a reference microphone for transducer comparisons or acoustic test and measurement. Equally comfortable in the studio, the 4007 is ideal for high SPL applications including the recording of drums, percussion and brass instruments. A foam windscreen and microphone clip are included.

#### **Specifications**

#### Directional characteristics:

Omnidirectional

Frequency range:

20 Hz to 40 kHz

Sensitivity, nominal, ±2 dB at 250 Hz:

2.5 mV/Pa; -52 dB re. 1 V/Pa

Equivalent noise level, A-weighted:

Typ. 24 dB(A) re. 20 µPa (max. 26 dB(A))

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

Typ. 70 dB(A)

#### Dynamic range:

Typ. 124 dB

Max. SPL, peak before clipping:

155 dB

## Power supply: Connector:

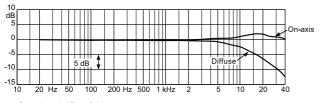
48 V Phantom power (± 4 V)

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

#### Classification:

Conforms to IEC 61672 Class I

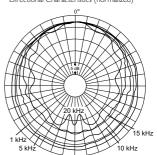
#### **Frequency Response**



On-axis and diffuse-field responses

#### Polar Pattern

Directional Characteristics (normalized)



Order number

4007

## 4012 Cardioid Microphone, 130 V



### **Key features**

Offering the linear response and high SPL handling of the 4011, the 130V 4012 differs in its powering method and its single-ended design. The high-voltage, direct power supply to the 4012's preamp ensures higher capsule output voltage handling bringing unparalleled clarity and

transparency to the sonic signature. The 4012 is perfect for XY and ORTF arrays over a drum kit, acoustic piano or for ensemble recording. A foam windscreen and microphone clip are included.

### **Specifications**

Directional characteristics:

Cardioid

Frequency range, ± 2 dB:

On-axis: 40 Hz - 20 kHz

Sensitivity, nominal, ±2 dB:

12 mV/Pa; -38 dB re 1 V/Pa

Equivalent noise level, A-weighted:

Typ. 19 dB(A) re. 20  $\mu$ Pa (max. 20 dB(A)) S/N ratio, re. 1 kHz at 1 Pa (94 dB SPL):

75 dB(A)

#### Dynamic range:

Typ. 97 dB

Max. SPL, peak before clipping:

168 dB

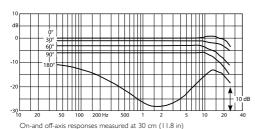
Power supply:

130 V

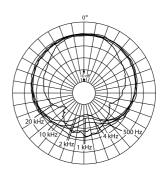
#### Connector:

4-pin modified XLR-M (High Voltage)

#### **Frequency Response**



#### Polar Pattern



## 4016 Wide Cardioid Microphone, 130 V



### **Key features**

The 4016 wide cardioid is the high voltage (130 V) counterpart to the 4015. The two are acoustically identical, but differ in their sound level handling and powering approach. The higher voltage supplied to the preamp of the 4016 provides an enhanced sonic character and higher

SPL handling than 48V microphones. The 4016 offers 168 dB SPL peak before clipping and a linear off-axis response that perfectly renders any leakage that occurs, but at a lower level. A foam windscreen and microphone clip are included.

#### **Specifications**

#### **Directional characteristics:**

Wide cardioid

#### Frequency range, ± 2 dB:

On-axis: 40 Hz to 20 kHz + 3/-2 dB in 60 cm distance with a max. 3 dB soft boost at 10 - 15 kHz

#### Sensitivity, nominal, ±2 dB:

12 mV/Pa; -38 dB re 1 V/Pa

#### Equivalent noise level, A-weighted:

Typ. 19 dB(A) re. 20 µPa (max. 20 dB(A))

#### Dynamic range:

Typ. 97 dB

#### Max. SPL, peak before clipping:

168 dB SPL peak

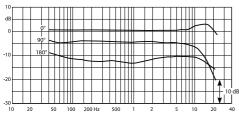
#### Power supply:

130 V

#### Connector:

4-pin modified XLR-M (High Voltage)

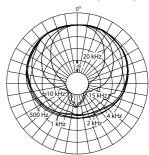
#### Frequency Response



On and off axis frequency response measured at 60 cm (23.6 in)

#### Polar Pattern

Directional Characteristics (normalized)



## 4041-S Large Diaphragm Microphone, Solid State, 130 V



### **Key features**

The 4041 offers a 1" large diaphragm capsule and comes in three distinct versions: two high-voltage designs and one phantom powered. Furthermore, the high-voltage versions are available with a solid state preamp design

(4041-S) or a tube preamp (4041-T2). With its delicate 8 kHz boost, the 4041 is targeted for vocal or acoustic guitar recordings.

A microphone holder is included...

### **Specifications**

#### Directional characteristics:

Omnidirectional

Frequency range, ± 2 dB:

10 Hz - 20 kHz with 4 - 6 dB soft boost at 8 kHz

Sensitivity, nominal, ±2 dB:

90 mV/Pa -21 dB re. I V/Pa

Equivalent noise level, A-weighted:

Max. 7 dB(A) re. 20 µPa

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

87 dB

#### Dynamic range:

Typ. 119 dB

Max. SPL, peak before clipping:

144 dB

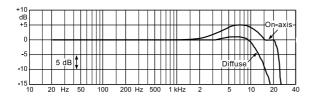
Power supply:

130 V

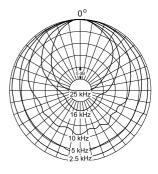
Connector:

7-pin modified XLR-M (High Voltage)

#### **Frequency Response**



#### Polar Pattern



## 4041-T2 Large Diaphragm Microphone, Tube, 130 V



### **Key features**

Driven with the ultra-clean DPA HMA5000 power supply and mic amp, the 4041-T2 offers slight 2nd harmonic tube coloration, giving it a unique sonic character not found in solid-state versions. In contrast to other large-diaphragm,

vintage tube classics, the DPA 4041 has low inherent noise and excellent peak level handling, offering color without dynamic limits. A microphone holder is included.

### **Specifications**

**Directional characteristics:** 

Omnidirectional

Frequency range, ± 2 dB:

10 Hz - 20 kHz with 4 - 6 dB soft boost at 8 kHz

Sensitivity, nominal, ±2 dB:

85 mV/Pa; -22 dB re. I V/Pa

Equivalent noise level, A-weighted:

Typ. 9 dB(A) re. 20  $\mu$ Pa

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

85 dB(A)

#### Dynamic range:

Typ. 117 dB

Max. SPL, peak before clipping:

144 dB

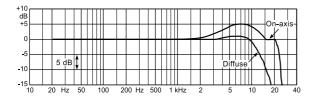
Power supply:

130 V via HMA5000

Connector:

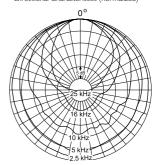
7-pin modified XLR-M (High Voltage)

#### **Frequency Response**



#### Polar Pattern

Directional Characteristics (normalized)



Order number

● 4041-T2

## 4041-SP Large Diaphragm Microphone, P48



### **Key features**

Designed to work with standard 48V phantom power yet offering the advantages of high voltage environments, the 4041-SP uses an integral step-up voltage converter to supply the capsule with 190V polarization voltage. This ability, paired with the 4041's large diaphragm,

makes it the perfect studio vocal microphone. Peak levels exceeding 145 dB SPL around a singer's mouth are easily handled due to the mic's greater diaphragm dispersion which offers a cleaner sonic picture despite the SPL. A microphone holder is included..

## **Specifications**

#### **Directional characteristics:**

Omnidirectional

Frequency range, ± 2 dB:

20Hz - 20kHz with 4 - 6 dB soft boost at 8 kHz

Sensitivity, nominal, ±2 dB:

70 mV/Pa; -26dB re. 1 V/Pa

Equivalent noise level A-weighted:

Max. 8 dB(A) re. 20 μPa

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

86 dB(A)

Dynamic range:

Typ. 118 dB

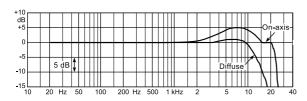
Max. SPL, peak before clipping:

134 dB

Connector:

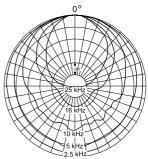
3-Pin XLR-M (Standard P48)

#### **Frequency Response**



#### **Polar Pattern**

Directional characteristics (normalized)



Order number

● 4041-SP

## 3532-S Large Diaphragm Stereo Kit with 4041-S,

Solid State, 130V



### **Key features**

The 3532 is one of DPA's most versatile solutions for stereo recording. The kit's 4041 mic offers an omni, stainless steel, I" capsule and comes in three distinct versions all coming with a calibrated stereo bar, mounting clips and foam windscreens. The 3532-S is the high-voltage version offering 144 dB SPL and adding a high-voltage amplifier and special

cable while the 3532-T2, also high voltage, alternatively offers a pentode vacuum tube preamplifier. The 3532-SP is the 48V version offering 120 dB SPL. All mics come in a sturdy briefcase for easy travel and access to all accessories. See microphone specifications on page 97.

### **Matching specs**

Matching tolerance (frequency response and sensitivity):

±0.5 dB (20 Hz - 20 kHz)

Phase deviation:

< 5°

#### What's in the box

 $2\times404$  l-S Large Diaphragm Microphone, Solid State, 130 V l  $\times$  HMA5000 High Voltage Microphone Amplifier

2 x DAO4110 Microphone Cable, 10m (32.8 ft)

2 x DUA0021 Foam Windscreeen

- I x UA0836 Stereo Boom with Holders
- I x DYS0917 Thread Adapter for Stereo Boom
- 2 x UA0961 Microphone Holder

## 3532-T2 Large Diaphragm Stereo Kit with 4041-T2,

Tube, 130V



## **Key features**

The 3532 is one of DPA's most versatile solutions for stereo recording. The kit's 4041 mic offers an omni, stainless steel, I" capsule and comes in three distinct versions all coming with a calibrated stereo bar, mounting clips and foam windscreens. The 3532-S is the high-voltage version offering 144 dB SPL and adding a high-voltage amplifier

and special cable while the 3532-T2, also high voltage, alternatively offers a pentode vacuum tube preamplifier. The 3532-SP is the 48V version offering I 20 dB SPL. All mics come in a sturdy briefcase for easy travel and access to all accessories.

See microphone specifications on page 98.

## **Matching specs**

#### Matching tolerance:

±0.5 dB (20 Hz - 20 kHz)

#### Phase deviation:

< 5°

#### What's in the box

 $2\times404\,\text{I-T2}$  Large Diaphragm Microphone, Tube, 130 V

I  $\times$  HMA5000 High Voltage Microphone Amplifier

 $2 \times DAO4110$  Microphone Cable, 10m (32.8 ft)

2 x DUA0021 Foam Windscreeen

I x UA0836 Stereo Boom with Holders

I x DYS0917 Thread Adapter for Stereo Boom

2 x UA0961 Microphone Holder

## 3532-SP Large Diaphragm Stereo Kit with 4041-SP, P48



### **Key features**

The 3532 is one of DPA's most versatile solutions for stereo recording. The kit's 4041 mic offers an omni, stainless steel, I" capsule and comes in three distinct versions all coming with a calibrated stereo bar, mounting clips and foam windscreens. The 3532-S is the high-voltage version offering 144 dB SPL

## **Matching specs**

Matching tolerance (frequency response and sensitivity):

±0.5 dB (20 Hz - 20 kHz)

and adding a high-voltage amplifier and special cable while the 3532-T2, also high voltage, alternatively offers a pentode vacuum tube preamplifier. The 3532-SP is the 48V version offering 120 dB SPL. All mics come in a sturdy briefcase for easy travel and access to all accessories.

See microphone specifications on page 99.

#### Phase deviation:

< 5°

#### What's in the box

 $2 \times 404$  I-SP Large Diaphragm Microphone, P48

I x HMA5000 High Voltage Microphone Amplifier

2 x DAO4110 Microphone Cable, 10m (32.8 ft)

2 x DUA0021 Foam Windscreeen

I x UA0836 Stereo Boom with Holders

I x DYS0917 Thread Adapter for Stereo Boom

2 x UA0961 Microphone Holder

## 4090 Omnidirectional Microphone, Hi-Sens, P48



### **Key features**

The 4090 omni mic is a combination of the 4060 theater standard miniature mic and its DAD6001 48V phantom power XLR adapter. It has an extremely linear frequency response, fast transient response and is

perfect for calibration and system alignment applications such as tuning a PA system. It also excels at close-miking instruments which demand acoustic authenticity. A foam windscreen and microphone clip are included.

## **Specifications**

#### **Directional characteristics:**

Omnidirectional

Frequency range, ± 2 dB:

20 Hz - 20 kHz

Sensitivity, nominal, ±3 dB at I kHz:

20 mV/Pa; -34 dB re. I V/Pa

Equivalent noise level, A-weighted:

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

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

Typ. 71 dB(A)

#### Dynamic range:

Typ. 100 dB

Max. SPL, peak before clipping:

134 dB

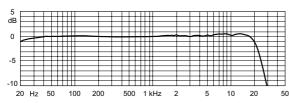
Power supply:

48 V Phantom power ± 4 V

Connector:

3-Pin XLR-M

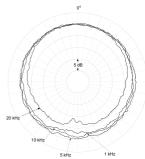
#### Frequency Response



Typical on-axis frequency response in free field

#### Polar Pattern

Directional characteristics (normalized)



## 4091 Omnidirectional Microphone, Low-Sens, P48



### **Key features**

For situations requiring high SPL handling for recording and stage work, the DPA 4091 offers 144 dB SPL before clipping. The 4091 is perfect for close-miking an electric guitar amp, brass and drums and its lack of proximity effect

allows close positioning without the associated bass boost. A foam windscreen and microphone clip are included.

## **Specifications**

**Directional characteristics:** 

Omnidirectional

Frequency range, ± 2 dB: 20 Hz – 20 kHz

Sensitivity, nominal, ± 3 dB at 1 kHz:

6 mV/Pa; -44 dB re. I V/Pa

Equivalent noise level, A-weighted:

Typ. 26 dB(A) re. 20 µPa (max. 28 dB(A))

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

Typ. 68 dB(A)

#### Dynamic range:

Typ. 97 dB

Max. SPL, peak before clipping:

144 dB

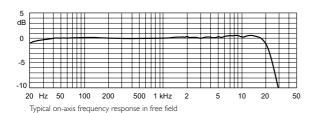
Power supply:

48 V Phantom power ± 4 V

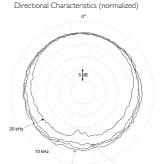
Connector:

3-Pin XLR-M

#### **Frequency Response**



#### Polar Pattern



## Notes

# **DPA** Accessories

DPA's wide range of accessories increase the value of the DPA microphones by leaps and bounds. DPA has more than 150 products designed for use with its microphones. This range of helper-products are modelled to allow precise placement, easy, repeatable setup, provide protection from wind, rain and noise, offer passive acoustic modification and more.

DPA's dedication to excellence carries forward into its accessories which are elegantly

designed and, where applicable, packaged with the microphones as a kit so users can safely store, travel and be assured all parts arrive intact for the next job.

Maintaining a clean visual aesthetic throughout the product line is a large part of DPA's design philosophy, making our microphones and accessories effortlessly blend in with their surroundings for use in broadcast, live applications and on the film or TV set.



## **Miniature Microphones Accessories**













































































































# **Headset Microphones Accessories**



























































































































# d:vote<sup>™</sup> 4099 Instrument Microphones Accessories































# d:facto™ Vocal Microphone Accessories









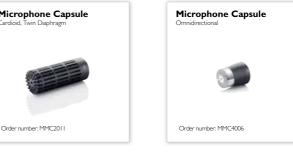


























# d:dicate™ Recording Microphones Accessories























































**Compact Microphone** 

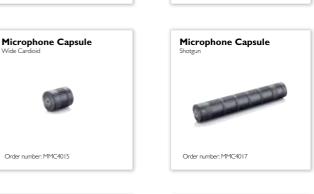
Microphone Capsule

Order number: MMC4006



Microphone Capsule



















## **Surround Solutions Accessories**







## **Other DPA Microphones Accessories**



















































# **DPA Adapters**

It's important that our users can easily use their DPA Miniature, Headset and d:vote™ 4099 Instrument Microphones with all third-party wireless systems. So DPA has created a large array of adapters to allow the user to effortlessly connect our range of microphones to any bodypack, camera-mount transmitter, connector or cable. We have adapters for AKG, Audio Ltd., Audio-Technica, Beyerdynamic, Electro-Voice, Lectrosonics, Micron, Mipro, Pastega, Telex ProStar, Ramsa, Samson, Sennheiser, Shure, Sony, Toa,

Vega and many other systems. Our miniature microphones use MicroDot adapters, allowing users to connect their mics to most professional wireless systems available.

Some MicroDot varieties provide attenuation at 800 Hz for added clarity when miniature microphones are costume-mounted or bodyworn. Other adapters offer clips and cable management making it easy to conceal for use in broadcast, live, TV and film applications.



## Adapters for AKG

































#### Adapters for Audio-Technica

















## Adapters for Beyerdynamic



















## Adapter for Electro-Voice



## **Adapters for Lectrosonics**







# Adapter for Line 6



## Adapter for Micron



## Adapters for Mipro

















## Adapters for Pastega





## Adapter for Ramsa



# Adapter for Sabine



## Adapters for Samson















## Adapters for Sennheiser





Order number: DAD6003













# Adapters for Shure





















## Adapters for Sony











## Adapter for TELEX



## Adapters for TOA







#### **Adapters for Trantec**







## Adapters for Vega





## Adapters for Wisycom







## Adapter for X2



## XLR Adapters







## Adapters for Zaxcom





# Notes

# Index

Product	Page	Product	Page	Product	Page
Troduct	Tage	Troduct	Tage	Troduct	Tage
			• • • • • • • • • • • • • • • • • • • •	····	
2006A	60, 72	ADH0004	108	DAO4020	121
2006C	61, 73	ADH0005	108	DAO4050	121
2011A	62, 74	AHM6000	117	DAO4110	126
2011C	63, 75	AHM6000-L	117	DAO5105	124
3506A	82	AHM6000-S	117	DAO5110	124
3511A	83	AHM6001	117	DAO5120	124
3532-S	100	AHM6001-L	117	DAO5150	124
3532-SP	102	AHM6001-S	117	DAO6005	112
3532-T2	101	APE30RS	122	DAO6006	112
4003	92	APE40RS	122	DAO6010	112
4004	93	APE50RS	122	DAO6015	112
4006A 4006C	64, 76, 82, 86, 87	BC4099	118	DAO6016	112
	65, 77 94	BLM4060	24	DAO(017	112
4007 4011A	66, 78, 87	BLM6000-B	108 108	DAO6020 DAO6050	112 112
4011C	67, 79	BLM6000-W BT1500	121	DC4099	118
4012	95	CC4099	118	DD0251	124, 126
4015A	68, 80, 88	CH16B00	112	DD0254	124, 126
4015C	69, 81	CH16C00	112	DD0297	124, 126
4016	96	CH16F00	112	DDS0731	126
4017B	70	CM1618B00	118	DKE0034-0	116
4017B-R	71	CM2218B00	118	DKE0034-1	120
4041-S	97, 100	DAD3050	142	DKE0034-4	119
4041-SP	99, 102	DAD3051	137	DKE0034-5	119
4041-T2	98, 101	DAD3052	130	DMM0001	108
4060-BM	8, 18, 20, 21	DAD3053	138	DMM0002-B	108
4060-CM	8	DAD3056	134	DMM0002-W	108
4060-FM	8	DAD3057	144	DMM0003-B	108
4060-WM	8	DAD3058	141	DMM0003-W	108
4061-BM	9, 19, 22	DAD4099-BC	144	DMM0004-B	108
4061-CM	9	DAD6001-BC	144	DMM0004-W	108
4061-FM	9	DAD6002	139	DMM0005	109
4061-WM	9	DAD6003	139, 140, 142, 143	DMM0007	109
4062-BM	10	DAD6004	131	DMM0008-B	109
4062-FM	10	DAD6006	133	DMM0008-W	109
4063-BM	11	DAD6008	141	DMM0009	110
4063-FM	// //	DAD6009	138	DMM0011-B DMM0011-W	109
4063-WM 4065-BL	33	DAD6010 DAD6011	135, 140, 142 140, 142	DMM0012	109 110
4065-BR	33	DAD6012	134	DMM0014	109
4065-FL	33	DAD6017			107
4065-FR				DMM0015	109
	33		130, 138, 139 137 143	DMM0015 DMM0016	109
4066-B	33 34	DAD6018	137, 143	DMM0016	109
4066-B 4066-C	33 34 34	DAD6018 DAD6019	137, 143 141		
4066-B 4066-C 4066-F	34	DAD6018	137, 143	DMM0016 DMM0017-B	109 109
4066-C	34 34	DAD6018 DAD6019 DAD6021	137, 143 141 132, 134	DMM0016 DMM0017-B DMM0017-W	109 109 109
4066-C 4066-F	34 34 34	DAD6018 DAD6019 DAD6021 DAD6022	137, 143 141 132, 134 132	DMM0016 DMM0017-B DMM0017-W DMM0509	109 109 109 110
4066-C 4066-F 4067-B	34 34 34 35	DAD6018 DAD6019 DAD6021 DAD6022 DAD6024	137, 143 141 132, 134 132 144	DMM0016 DMM0017-B DMM0017-W DMM0509 DMM0512	109 109 109 110 110
4066-C 4066-F 4067-B 4067-F	34 34 34 35 35	DAD6018 DAD6019 DAD6021 DAD6022 DAD6024 DAD6025	137, 143 141 132, 134 132 144 135	DMM0016 DMM0017-B DMM0017-W DMM0509 DMM0512 DUA0019	109 109 109 110 110
4066-C 4066-F 4067-B 4067-F 4071-BM 4071-FM 4071-WM	34 34 34 35 35 12, 16, 17 12	DAD6018 DAD6019 DAD6021 DAD6022 DAD6024 DAD6025 DAD6025 DAD6026 DAD6028 DAD6030	137, 143 141 132, 134 132 144 135 133, 142 132	DMM0016 DMM0017-B DMM0017-W DMM0509 DMM0512 DUA0019 DUA0020 DUA0028 DUA0040	109 109 109 110 110 125 122 122
4066-C 4066-F 4067-B 4067-F 4071-BM 4071-FM 4071-WM 4080-BM	34 34 35 35 12, 16, 17 12	DAD6018 DAD6019 DAD6021 DAD6022 DAD6024 DAD6025 DAD6026 DAD6028	137, 143 141 132, 134 132 144 144 135 133, 142	DMM0016 DMM0017-B DMM0017-W DMM0509 DMM0512 DUA0019 DUA0020 DUA0020 DUA0028 DUA0040 DUA0073	109 109 109 110 110 125 122
4066-C 4066-F 4067-B 4067-F 4071-BM 4071-FM 4071-VVM 4080-BM 4081-BM	34 34 34 35 35 12, 16, 17 12 12 13 14, 23	DAD6018 DAD6019 DAD6021 DAD6022 DAD6022 DAD6024 DAD6025 DAD6026 DAD6028 DAD6030 DAD6030 DAD6032 DAD6033	137, 143 141 132, 134 132 144 135 133, 142 132 134, 141 133, 136	DMM0016 DMM0017-B DMM0017-W DMM0509 DMM0512 DUA0019 DUA0020 DUA0028 DUA0028 DUA0040 DUA0073 DUA0100	109 109 109 110 110 125 122 122 126 127 128
4066-C 4066-F 4067-B 4067-F 4071-BM 4071-FM 4071-WM 4080-BM 4081-BM 4088-B	34 34 34 35 35 12, 16, 17 12 12 13 14, 23 36	DAD6018 DAD6019 DAD6021 DAD6022 DAD6022 DAD6024 DAD6025 DAD6026 DAD6028 DAD6030 DAD6030 DAD6031 DAD6033 DAD6034	137, 143 141 132, 134 132 144 135 133, 142 132 134, 141 133, 136 132 139, 143	DMM0016 DMM0017-B DMM0017-W DMM0509 DMM0512 DUA0019 DUA0020 DUA0028 DUA0040 DUA0040 DUA0073 DUA0100 DUA0513	109 109 109 110 110 125 122 122 122 126 122 121
4066-C 4066-F 4067-B 4067-F 4071-BM 4071-FM 4071-WM 4080-BM 4081-BM 4088-B 4088-C	34 34 35 35 12, 16, 17 12 12 13 14, 23 36 36	DAD6018 DAD6019 DAD6021 DAD6022 DAD6022 DAD6024 DAD6025 DAD6026 DAD6028 DAD6030 DAD6030 DAD6032 DAD6033 DAD6033 DAD6034 DAD6035	137, 143 141 132, 134 132 144 135 133, 142 132 134, 141 133, 136 132 139, 143	DMM0016 DMM0017-B DMM0017-W DMM0509 DMM0512 DUA0019 DUA0020 DUA0028 DUA0040 DUA0073 DUA0100 DUA0513 DUA0518B	109 109 109 110 110 125 122 122 126 122 121 108
4066-C 4066-F 4067-B 4067-F 4071-BM 4071-FM 4080-BM 4081-BM 4088-B 4088-C 4088-F	34 34 35 35 12, 16, 17 12 13 14, 23 36 36 36	DAD6018 DAD6019 DAD6021 DAD6022 DAD6022 DAD6024 DAD6025 DAD6026 DAD6028 DAD6030 DAD6032 DAD6033 DAD6034 DAD6035 DAD6035 DAD6036	137, 143 141 132, 134 135 144 135 133, 142 132 134, 141 133, 136 132 139, 143 131	DMM0016 DMM0017-B DMM0017-W DMM0509 DMM0512 DUA0019 DUA0020 DUA0028 DUA0040 DUA0073 DUA0100 DUA0513 DUA0518B DUA0518W	109 109 109 110 110 125 122 122 126 122 121 108 111
4066-C 4066-F 4067-B 4067-F 4071-BM 4071-FM 4071-WM 4080-BM 4081-BM 4081-BM 4088-B 4088-C 4088-F	34 34 34 35 35 12, 16, 17 12 12 13 14, 23 36 36 36 103	DAD6018 DAD6019 DAD6021 DAD6022 DAD6022 DAD6024 DAD6025 DAD6026 DAD6026 DAD6028 DAD6030 DAD6032 DAD6033 DAD6034 DAD6035 DAD6035 DAD6036 DAK4060	137, 143 141 132, 134 132 144 135 133, 142 132 134, 141 133, 136 132 139, 143 131 142 112	DMM0016 DMM0017-B DMM0017-W DMM0509 DMM0512 DUA0019 DUA0020 DUA0028 DUA0028 DUA0020 DUA0028 DUA00100 DUA00513 DUA0518B DUA0518W DUA0523B	109 109 109 110 110 125 122 122 122 121 108 111 111
4066-C 4066-F 4067-B 4067-F 4071-BM 4071-FM 4071-WM 4080-BM 4081-BM 4088-B 4088-C 4088-F 4090	34 34 34 35 35 12, 16, 17 12 12 13 14, 23 36 36 36 103	DAD6018 DAD6019 DAD6021 DAD6022 DAD6022 DAD6024 DAD6025 DAD6026 DAD6028 DAD6030 DAD6030 DAD6031 DAD6033 DAD6034 DAD6035 DAD6036 DAM6036 DAK4060 DAK4071-E	137, 143 141 132, 134 132 144 135 133, 142 132 134, 141 133, 136 132 139, 143 131 142 112	DMM0016 DMM0017-B DMM0017-W DMM0509 DMM0512 DUA0019 DUA0020 DUA0028 DUA0028 DUA0040 DUA0073 DUA0100 DUA0513 DUA0518B DUA0523B DUA0523B DUA0523C	109 109 109 110 110 125 122 122 126 122 121 108 111 111 111
4066-C 4066-F 4067-B 4067-F 4071-BM 4071-FM 4071-WM 4080-BM 4081-BM 4088-B 4088-C 4088-F 4090 4091	34 34 34 35 35 12, 16, 17 12 12 13 14, 23 36 36 36 103 104 15	DAD6018 DAD6019 DAD6021 DAD6022 DAD6024 DAD6025 DAD6025 DAD6026 DAD6028 DAD6030 DAD6033 DAD6033 DAD6033 DAD6034 DAD6035 DAD6036 DAV6036 DAK4071-E DAK4071-F	137, 143 141 132, 134 132 144 135 133, 142 132 134, 141 133, 136 132 139, 143 131 142 112 112	DMM0016 DMM0017-B DMM0017-W DMM0509 DMM0512 DUA0019 DUA0020 DUA0028 DUA0040 DUA0073 DUA0100 DUA0513 DUA0518B DUA0518W DUA0523B DUA0523C DUA0523F	109 109 109 110 110 125 122 122 122 126 122 121 108 111 111 116
4066-C 4066-F 4067-B 4067-F 4071-BM 4071-FM 4071-WM 4080-BM 4081-BM 4088-B 4088-C 4088-F 4090 4091 4098HB 4098HW	34 34 35 35 12, 16, 17 12 12 13 14, 23 36 36 36 30 104 15	DAD6018 DAD6019 DAD6021 DAD6022 DAD6022 DAD6024 DAD6025 DAD6026 DAD6028 DAD6030 DAD6033 DAD6033 DAD6034 DAD6035 DAD6035 DAD6036 DAK4060 DAK4060 DAK4071-E DAC0130	137, 143 141 132, 134 135 134 135 134, 142 135 134, 141 133, 136 132 139, 143 131 142 112 112 112 112	DMM0016 DMM0017-B DMM0017-W DMM0509 DMM0512 DUA0019 DUA0020 DUA0020 DUA0028 DUA0040 DUA0073 DUA0100 DUA0513 DUA0518 DUA0518W DUA0523B DUA0523C DUA0523L	109 109 109 110 110 125 122 122 126 122 121 108 111 111 116
4066-C 4066-F 4067-B 4067-F 4071-BM 4071-FM 4071-WM 4080-BM 4081-BM 4088-B 4088-C 4088-F 4090 4091 4098HB 4098HW 5006-11A	34 34 34 35 35 12, 16, 17 12 12 13 14, 23 36 36 103 104 15 15	DAD6018 DAD6019 DAD6021 DAD6022 DAD6024 DAD6025 DAD6026 DAD6028 DAD6030 DAD6032 DAD6033 DAD6033 DAD6034 DAD6035 DAD6036 DAK4060 DAK4071-E DAK4071-F DAO0130 DAO0131	137, 143 141 132, 134 133 134 135 133, 142 132 134, 141 133, 136 132 139, 143 131 142 112 112 112 112 112 112 112 112 11	DMM0016 DMM0017-B DMM0017-W DMM0509 DMM0512 DUA0019 DUA0020 DUA0028 DUA0040 DUA0073 DUA0100 DUA0513 DUA0513 DUA0518W DUA0523E DUA0523C DUA0523L DUA0523L DUA0531B	109 109 109 110 110 1125 122 122 122 121 108 111 111 116 116 116 116
4066-C 4066-F 4067-B 4067-F 4071-BM 4071-FM 4071-FM 4080-BM 4080-BM 4088-B 4088-C 4088-F 4090 4091 4098HB 4098HW 5006-11A 5006A	34 34 34 35 35 12, 16, 17 12 12 13 14, 23 36 36 36 103 104 15 15 87	DAD6018 DAD6019 DAD6021 DAD6022 DAD6022 DAD6024 DAD6025 DAD6026 DAD6028 DAD6030 DAD6032 DAD6033 DAD6034 DAD6035 DAD6036 DAK4060 DAK4071-E DAK4071-F DAO0130 DAO0131 DAO0131	137, 143 141 132, 134 132 144 135 133, 142 132 134, 141 133, 136 132 139, 143 131 142 112 112 112 112 112 112 112 112 11	DMM0016 DMM0017-B DMM0017-W DMM0509 DMM0512 DUA0019 DUA0020 DUA0028 DUA0028 DUA0073 DUA0100 DUA0513 DUA0513B DUA0523B DUA0523E DUA0523F DUA0523L DUA0531B DUA0531B DUA0531B	109 109 109 110 110 125 122 122 122 121 108 111 116 116 116 116 115
4066-C 4066-F 4067-B 4067-F 4071-BM 4071-FM 4071-WM 4080-BM 4081-BM 4088-B 4088-C 4088-F 4090 4091 4098HW 5006-11A 5006A 5015A	34 34 34 35 35 12, 16, 17 12 12 13 14, 23 36 36 36 103 104 15 15 87 86 88	DAD6018 DAD6019 DAD6019 DAD6021 DAD6022 DAD6024 DAD6025 DAD6026 DAD6028 DAD6030 DAD6032 DAD6033 DAD6034 DAD6035 DAD6036 DAK4060 DAK4071-E DAK4071-F DAC0130 DAO0131 DAO0131 DAO0132 DAO0132	137, 143 141 132, 134 132 144 135 133, 142 132 134, 141 133, 136 132 139, 143 131 142 112 112 112 112 112 112 112 112 11	DMM0016 DMM0017-B DMM0017-W DMM0509 DMM0512 DUA0019 DUA0020 DUA0028 DUA0028 DUA0073 DUA0100 DUA0513 DUA0518B DUA0518W DUA0523C DUA0523C DUA0523F DUA0523L DUA0531B DUA0531F	109 109 109 110 110 125 122 122 122 126 127 121 108 111 111 111 111 116 116 116 116 115 115
4066-C 4066-F 4067-B 4067-F 4071-BM 4071-FM 4071-FM 4080-BM 4080-BM 4088-B 4088-C 4088-F 4090 4091 4098HB 4098HW 5006-11A 5006A	34 34 34 35 35 12, 16, 17 12 12 13 14, 23 36 36 36 103 104 15 15 87	DAD6018 DAD6019 DAD6021 DAD6022 DAD6022 DAD6024 DAD6025 DAD6026 DAD6028 DAD6030 DAD6032 DAD6033 DAD6034 DAD6035 DAD6036 DAK4060 DAK4071-E DAK4071-F DAO0130 DAO0131 DAO0131	137, 143 141 132, 134 132 144 135 133, 142 132 134, 141 133, 136 132 139, 143 131 142 112 112 112 112 112 112 112 112 11	DMM0016 DMM0017-B DMM0017-W DMM0509 DMM0512 DUA0019 DUA0020 DUA0028 DUA0028 DUA0073 DUA0100 DUA0513 DUA0513B DUA0523B DUA0523E DUA0523F DUA0523L DUA0531B DUA0531B DUA0531B	109 109 109 110 110 125 122 122 122 121 108 111 116 116 116 116 115

D	D	Dec de ce	D			
Product	Page	Product	Page	Product	Page	
DUA0532C	116	FIOF00-M	28	MMBOL90	114	
DUA0532F	116	FIOF00-M2	30	MMC2006	120, 123	
DUA0532L	116	FIOF00-S	29	MMC2011	120, 123	
DUA0560	110, 115	FIOLLB00	28	MMC4006	120, 123	
DUA0566	110	FIOLLB00-2	30	MMC4011	120, 123	
DUA0567	111, 115	FIOLLB00-M	28	MMC4011V	120, 123	
DUA0568	111, 115	FIOLLB00-M2	30	MMC4015	120, 123	
DUA0570	111	FIOLLB00-S	29	MMC4017	120, 123	
DUA0571	111	FMK4071	17	MMC4018V	120, 123	
DUA0572	111	FAADPA2B	119	MMC4041	125	
DUA0574	117	FAASE2-ewB	119	MMP4000-S	125	
DUA0575	117 111	FAASE5B FAASLIB	119 119	MMP4000-SP	125	
DUA0577 DUA0578	118	FAASLIB FAAWI2B	119	MMP4000-T2 MMP-A	125 123	
DUA0585	116	GC4099	118	MMP-B	123	
DUA0592	116	GE4099	119	MMP-C	123	
DUA0710	119	GM1500	121	OC5100	124	
DUA0715	120	HE2B12	115	PC4099	118	
DUA4099	118	HE2C12	115	RWK4017	123	
DUA6001	110	HE2F12	115	SB0400	121	
DUA6002	110	HE2L12	115	SBS0400	121	
DUA6003	110	HEB12	114	SM1500	121	
DUA6004	110	HEC12	114	SM4000-C	121	
DUA6005	110	HEF12	114	SMK4060	21	
DUA6006	110	HEL12	114	SMK4061	22	
DUA6015	116	IMK4060	18	SMK4081	23	
DUA6016	116	IMK4061	19	ST2006A	72	
DUA6017	110	KE0002	122	ST2006C	73	
DUA6018	110	KE0004	122	ST2011A	74	
DYS0917	125	KE0005	122	ST2011C	75	
EMK4071	16	L50B	126	ST4006A	76	
FA4018VDPAB	52	LMK4060-B	20	ST4006C	77	
FA4018VSE2-ewB	54	LMK4060-W	20	ST4011A	78	
FA4018VSE5B FA4018VSL1B	55 53	MB1500 MHS6005	121 109	ST4011C ST4015A	79 80	
FA4018VWI2B	56	MMA6000	111	ST4015C	81	
FIDB00	31	MMA6000-BC	111	STC4099	118	
FIDB00-2	32	MMB4066-B	117	TB4000	121, 125	
FIDB00-M	31	MMB4066-C	117	UA0638	126	
FIDB00-M2	32	MMB4066-F	117	UA0639	122, 125	
FIDC00	31	MMB4067-B	117	UA0658	126	
FIDC00-2	32	MMB4067-F	117	UA0777	124, 126	
FIDC00-M	31	MMB4088-B	117	UA0836	121, 125	
FIDC00-M2	32	MMB4088-C	117	UA0837	121, 125	
FIDF00	31	MMB4088-F	117	UA0896	122, 126	
FIDF00-2	32	MMBDB100	114	UA0897	125	
FIDF00-M	31	MMBDB120	113	UA0961	122, 125	
FIDF00-M2	32	MMBDC100	114	UC4099	118	
FIDLLB00	31	MMBDC120	113	VC4099	118	
FIDLLB00-2	32	MMBDF100	114	VO4099B	40	
FIDLLB00-M FIDLLB00-M2	31	MMBDF120	113 114	VO4099C	41 42	
	32 28	MMBDL100		VO4099D VO4099G	43	
FIOB00 FIOB00-2	30	MMBDL120 MMBOB040	113 113	VO4057G VO4099P	43	
FIOB00-2	28	MMBOB110	113	VO4099S	45	
FIOB00-M2	30	MMBOB90	114	VO4099T	46	
FIOB00-S	29	MMBOC040	113	VO4099U	47	
FIOC00	28	MMBOC110	113	VO4099V	48	
FIOC00-2	30	MMBOC90	114	WJ5100	124	
FIOC00-M	28	MMBOF040	113			
FIOC00-M2	30	MMBOF110	113			
FIOC00-S	29	MMBOF90	114			
FIOF00	28	MMBOL040	113			
FIOF00-2	30	MMBOLI10	113			

