

# Compact Microphones

## Compact Omnidirectional Microphones

4051 4052 4053

## Compact Cardioid Microphones

4021 4022 4023

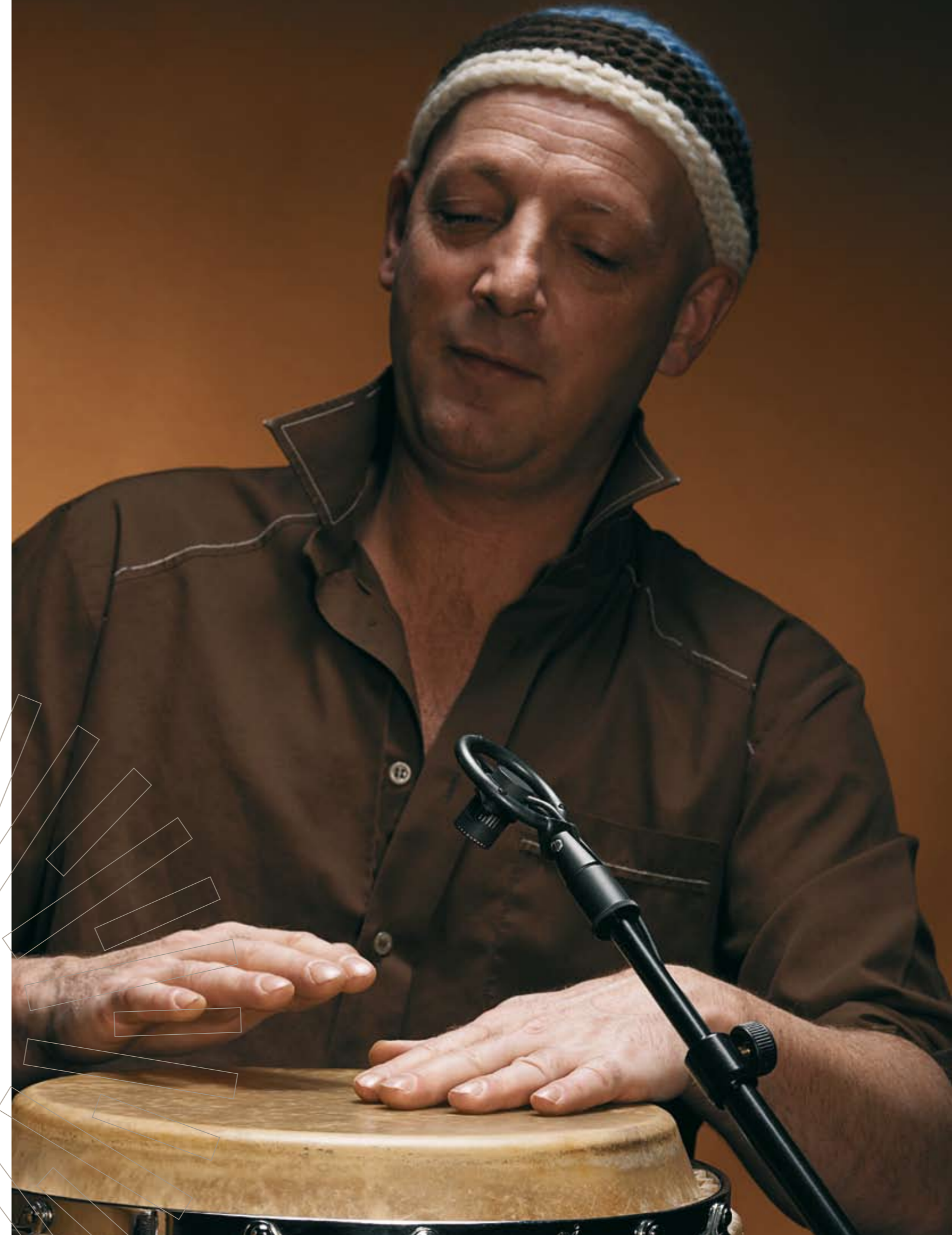
## Compact Wide Cardioid

4026 4027 4028

## Compact Stereo Kits

3521 3552

DPA Compact Microphones are the smaller cousin to our standard microphones and are also available in omni, cardioid and wide cardioid models. They are especially valuable for low profile use together with our elegantly designed stands, mounts and holders for close-miking of instruments, as table and podium mics, as well as reinforcement mics in live performance venues. The compact microphones combine the trademark DPA sound with aesthetic and functional design solutions.



## Compact Omnidirectional Microphones



- 4051 Compact Omnidirectional Microphone, Side Cable
- 4052 Compact Omnidirectional Microphone, Rear Cable
- 4053 Compact Omnidirectional Microphone, Connector



### Impressive sound in a small body

When you need a small, lightweight and inconspicuous microphone for top-quality recording, the compact design and clean, transparent sound of our versatile Compact Omnis make them the perfect choice. They are extremely popular as A-B stereo pairs in concert halls where quality recordings can be compromised by classic architecture.

These Compact Omnis use the same type of capsule as the DPA 4006 and are characterised by an impressive sensitivity, an extremely linear frequency response and a low noise-floor. This makes them ideal for all types of subtle sound sources, while their wide dynamic range also enables recording at higher SPLs without the worry of clipping or distortion. The Compact Omnis are also insensitive to handling-noise, pop-noise and humidity and exhibit no proximity effect.

The Compact Omnis are supplied with the DD0251 Free-field Grid and a DD0297 Diffuse-field Grid, which can also be interchanged with the optional UA0777 Nose Cone or DD0254 Close-miking Grid. These various interchangeable grids act as acoustic modification devices providing you with multiple microphone characteristics and thus additional recording application options. Read more about interchangeable grids on page 30. The SM4000 Suspension Mount and DUA0050 Windscreen are also included.

The Compact Omnis can be mounted, hung or concealed to create clean, transparent recordings. They are ideal in theatres, opera and concert halls or places of worship where there is a live audience, and for film applications - both in the studio and on location. These mics are also popular with musicians for close-miking instruments such as double bass, trumpet and piano. At the same time they are wonderful for ambience-miking in soundstages, sports stadiums and other situations where audience sound needs to be recorded.

### 3552 4052 Compact Stereo Kit

The 3552 is a complete stereo kit with two 4052 Compact Cardioid Microphones carefully matched within  $\pm 0.5$  dB on both frequency response (20 Hz - 20 kHz), self-noise and sensitivity. The phase responses are within 5°. Together with its accessories, this kit is designed especially for low profile mounting directly inside a piano. The goosenecks can also be mounted directly on microphone stands for various A-B stereo applications such as a full orchestra in a concert hall, choirs and other ambient recordings.

#### 3552 Kit includes

- 2 x 4052 Compact Omnidirectional Microphone, Rear Cable
- 2 x DD0251 Free-field Grid, Silver
- 2 x DD0297 Diffuse-field Grid, Black
- 2 x UA0777 Nose Cone
- 2 x GM4050 Gooseneck Mount for 4051/52/53
- 2 x MB4000 Magnet Base
- 2 x SM4000 Suspension Mount
- 2 x DUA0050 Windscreen for 4051/52/53



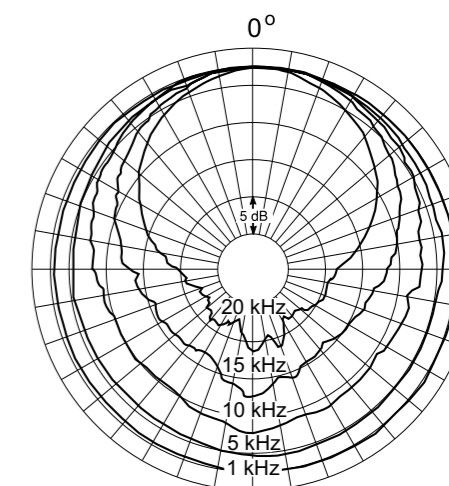
## Specifications



- 4051
- 4052
- 4053

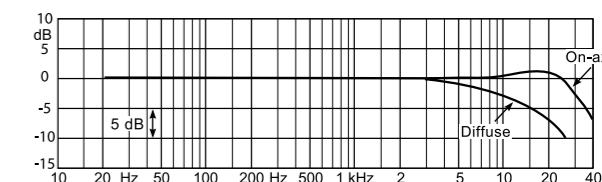
Directional characteristics:  
**Omnidirectional**  
 Principle of operation:  
**Pressure**  
 Cartridge type:  
 16 mm (0.6 in) pre-polarised condenser  
 Power supply:  
 48 V Phantom power  
 Frequency range,  $\pm 2$  dB:  
 20 Hz - 20 kHz  
 Sensitivity, nominal,  $\pm 2$  dB:  
 30 mV/Pa; -30 dB re. 1 V/Pa  
 Equivalent noise level, A-weighted:  
 Typ. 15 dB(A) re. 20  $\mu$ Pa  
 S/N ratio, re. 1 kHz at 1 Pa (94 dB SPL)  
 79 dB(A)  
 Total Harmonic Distortion:  
 <0.5% up to 125 dB SPL peak  
 <1% up to 131 dB SPL peak  
 Dynamic range:  
 Typ. 116 dB  
 Max. SPL, peak before clipping:  
 135 dB  
 Output impedance:  
 <300 Ohm  
 Cable drive capability:  
 Up to 100 m (328 ft)  
 Connector:  
 3-pin XLR-M (Standard P48)  
 Dimensions:  
 Length: 4051: 25 mm (1 in)  
           4052: 19 mm (0.8 in)  
           4053: 19 mm (0.8 in)  
 Diameter: 16 mm (0.6 in)  
 Weight: 4051: 22 g (0.8 oz)  
           4052: 20 g (0.7 oz)  
           4053: 22 g (0.8 oz)

### Polar Pattern

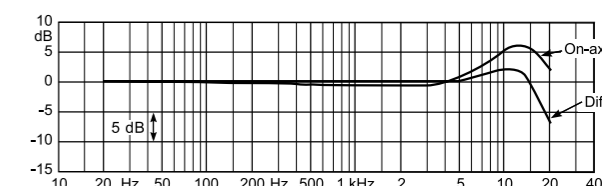


Directional Characteristics of 4051, 4052 & 4053 with Free-field Grid DD0251 fitted (normalised).

### Frequency Responses



On-axis and diffuse-field responses of 4051, 4052 & 4053 with Free-field Grid DD0251 fitted.



On-axis and diffuse-field responses of 4051, 4052 & 4053 with Diffuse-field Grid DD0297 fitted.

## Compact Cardioid Microphones



- 4021 Compact Cardioid Microphone, Side Cable
- 4022 Compact Cardioid Microphone, Rear Cable
- 4023 Compact Cardioid Microphone, Connector



### The choice of musicians for maximum clarity

When microphones have to be out of sight or instrument mounted, but maximum clarity and signal quality are essential, the compact design and high performance of these cardioid microphones make them the logical choice.

Our Compact Cardioids use the same capsule as the extremely popular 4011, but are preamplified using a built-in miniaturised thick-film mounted FET-amplifier. The result is incredibly compact, high-performance microphones that are ideally suited for the unobtrusive miking of all types of television, film, theatre, live performances and studio applications.

### Uniform frequency response

The microphones are capable of handling extensive SPL without distortion and the design ensures a true first-order cardioid pick-up pattern. The sound is natural and rich in detail, without adding colour to the source. Excellent off-axis characteristics enable the talent to move about without any off-axis colouration from the mic. In broadcast applications, the mics present the voice as one expects to hear it: clean and ambient, as though the broadcaster was in the same room.

### Limited in size, unlimited in application

High SPL handling also means that you can mount these Compact Cardioids closer to instruments to minimise leakage from other instruments. For spot-miking larger orchestras, these mics are hard to beat. In film and TV studios, they are excellent for off-camera voice recording or Foley work. For live on-camera recordings, their matt black finish gives them a classic yet unobtrusive appearance. For sound reinforcement in concert halls, theatres and places of worship, they provide clean, natural sound while limiting the effect of lighting reflection. All the compact cardioid microphones are delivered with the SM4000 Suspension Mount and DUA0020 Windscreen as standard.

### 3521 4021 Compact Stereo Kit, P48

The 3521 is a complete stereo kit with two 4021 Compact Cardioid Microphones carefully matched within  $\pm 1$  dB on both frequency response (40 Hz - 20 kHz), self-noise and sensitivity. The phase responses are within  $10^\circ$ . Complete with accessories, this kit is designed especially for low profile mounting directly inside a piano. With the XY/ORTF holder, the kit is transformed into an exceptional compact stereo pair for applications such as overhead-miking for drums, horn or string sections, choirs, main or as an additional spot pair for small or large acoustic ensembles.

#### 3521 Kit includes

- 2 x 4021 Compact Cardioid Microphone
- 2 x GM4000 Gooseneck Mount for 4021/22/23/26/27/28
- 2 x MB4000 Magnet Base
- 1 x CXO4000 Compact XY/ ORTF Stereo Holder
- 2 x SM4000 Suspension Mount
- 2 x DUA0020 Windscreen for 4021/22/23/26/27/28
- 1 x UA0897 Shock Mount
- 1 x EXY4000 Extension for CXY/CXO4000

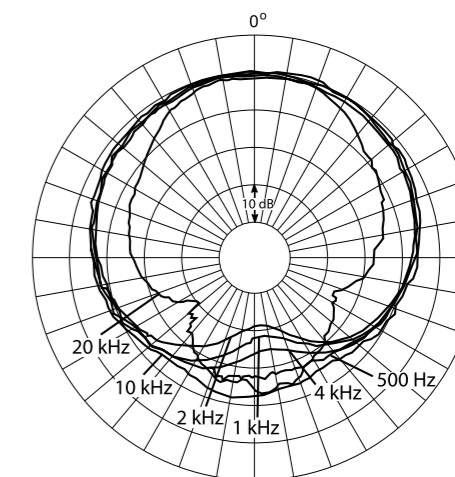


## Specifications

- 4021
- 4022
- 4023

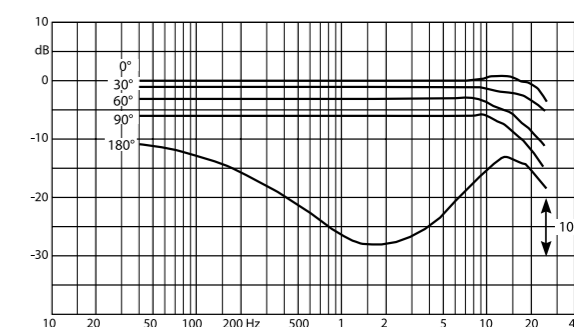
Directional characteristics:  
**Cardioid**  
 Principle of operation:  
**Pressure gradient**  
 Cartridge type:  
**19 mm (0.75 in) pre-polarised condenser**  
 Power supply:  
**48 V Phantom power**  
 Frequency range,  $\pm 2$  dB:  
**40 Hz - 20 kHz**  
 Sensitivity, nominal,  $\pm 2$  dB:  
**7 mV/Pa; -43 dB re. 1 V/Pa**  
 Equivalent noise level, A-weighted:  
**Typ. 20 dB(A) re. 20  $\mu$ Pa**  
 S/N ratio, re. 1 kHz at 1 Pa (94 dB SPL)  
**74 dB(A)**  
 Total Harmonic Distortion:  
**<0.5% up to 110 dB SPL peak**  
**<1% up to 116 dB SPL peak**  
 Dynamic range:  
**Typ. 96 dB**  
 Max. SPL, peak before clipping:  
**145 dB**  
 Output impedance:  
**<300 Ohm**  
 Cable drive capability:  
**Up to 100 m (328 ft)**  
 Connector:  
**3-pin XLR-M (Standard P48)**  
 Dimensions:  
**Length: 4021: 31 mm (1.2 in)**  
**4022: 35 mm (1.4 in)**  
**4023: 30 mm (1.2 in)**  
**Diameter: 19 mm (0.8 in)**  
**Weight: 4021: 27.5 g (1 oz)**  
**4022: 30 g (1.1 oz)**  
**4023: 33 g (1.2 oz)**

### Polar Pattern

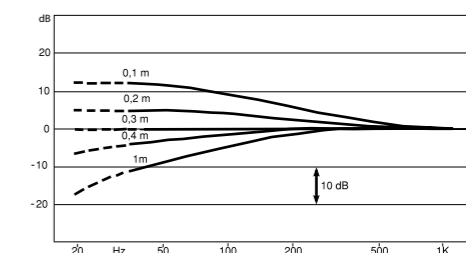


Directional characteristics of 4021, 4022 & 4023 (normalised). Distance between circles indicates 10 dB steps.

### Frequency Responses



On- and off-axis responses of 4021, 4022 & 4023 measured at 30 cm (11.8 in).



The proximity effect exhibited by 4021, 4022 & 4023 measured at 30 cm (11.8 in).

## Compact Wide Cardioid Microphones



- 4026 Compact Wide Cardioid Microphone, Rear Cable
- 4027 Compact Wide Cardioid Microphone, Side Cable
- 4028 Compact Wide Cardioid Microphone, Connector



### Brilliant sparkle of purity

The wide polar pattern of our Compact Wide Cardioid Microphones allows you to pick up a broader sound field than with a conventional cardioid. At the heart of the microphone is a capsule, which is in a class of its own. This capsule is unbeatable in combining purity and sound level handling. The microphone features the highest resolution and clarity available and has a rich bass response. In addition, the wide cardioid capsule design is acoustically calibrated with a pleasant and subtle high frequency lift, giving that brilliant sparkle of purity, which will take your recordings to a higher level.

The Compact Wide Cardioids use the same type of capsule as the DPA 4015, but are preamplified using a built-in miniaturised thick-film mounted FET-amplifier.

### Small, yet wide

The wide cardioid pattern is very useful when recording instruments with a complex radiation pattern, and for a visually discrete microphone setup, the compact size is indispensable. In combination with our Flamingo Stand, the DPA 4028 is an ideal low profile solution for the audio engineer as well as the set designer. With unbelievable depth and precision, the Compact Wide Cardioids will exceed your expectations for choirs, percussion setups, grand pianos, wind instruments and much more.



Excellent off-axis characteristics and a wide cardioid pattern cover a broad area.  
4027 in CSM4000 Compact Shock Mount and TB4000 Table Base.

## Specifications

- 4026
- 4027
- 4028

Directional characteristics:

Wide cardioid

Principle of operation:

Pressure gradient

Cartridge type:

19 mm (0.75 in) pre-polarised condenser

Power supply:

48 V Phantom power

Frequency range,  $\pm 2$  dB:

40 Hz - 20 kHz

Sensitivity, nominal,  $\pm 2$  dB:

7 mV/Pa; -43 dB re. 1 V/Pa

Equivalent noise level, A-weighted:

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

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

74 dB(A)

Total Harmonic Distortion:

<0.5% up to 110 dB SPL peak

<1% up to 116 dB SPL peak

Dynamic range:

Typ. 96 dB

Max. SPL, peak before clipping:

145 dB

Output impedance:

<300 Ohm

Cable drive capability:

Up to 100 m (328 ft)

Connector:

3-pin XLR-M (Standard P48)

Dimensions:

Length: 4026: 35 mm (1.4 in)

4027: 31 mm (1.2 in)

4028: 30 mm (1.2 in)

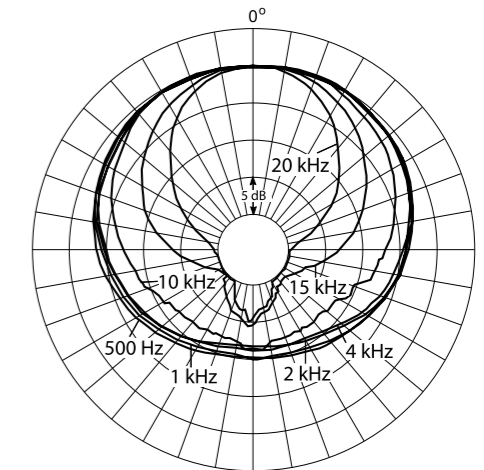
Diameter: 19 mm (0.8 in)

Weight: 4026: 30 g (1 oz)

4027: 27.5 g (1.1 oz)

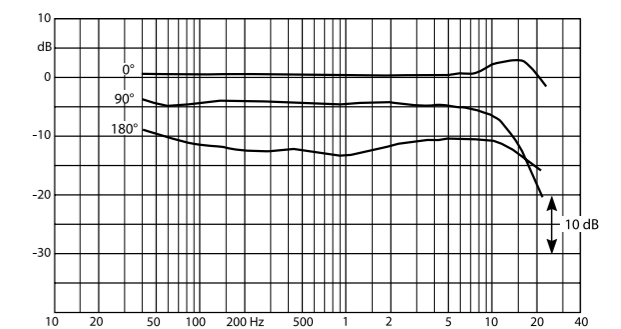
4028: 33 g (1.2 oz)

### Polar Pattern

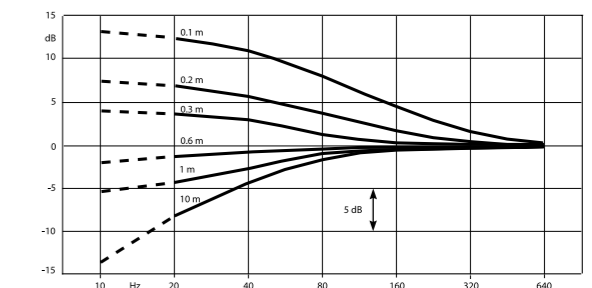


Directional characteristics of 4026, 4027, 4028 (normalised). Distance between circles indicates 5 dB steps.

### Frequency Responses



On and off-axis responses of 4026, 4027 & 4028 measured at 60 cm (23.6 in).



The proximity effect exhibited by the 4026, 4027 & 4028.

## Accessories Available for Compact Microphones



### Acoustic Modification Accessories

- 1 DD0251 Free-field Grid, Silver
- 2 DD0254 Close-miking Grid, Trapezoid, Silver
- 3 DD0297 Diffuse-field Grid, Black
- 4 DUA0020 Windscreen for 4021/22/23/26/27/28
- DUA0022 Twin Windscreen for 4023
- DUA0050 Windscreen for 4051/52/53
- 5 UA0777 Nose Cone

### Holders

- 6 CH4000 Microphone Holder for Cello
- 7 CSM4000 Compact Shock Mount
- 8 CXO4000 Compact XY/ORTF Stereo Holder
- 9 CXY4000 Compact XY Stereo Holder
- 10 EXY4000 Extension for CXY/CXO4000
- 11 GM4000 Gooseneck Mount for 4021/22/23/26/27/28
- GM4050 Gooseneck Mount for 4051/52/53
- 12 MB4000 Magnet Base
- 13 SM4000 Suspension Mount
- 14 TB4000 Table Base
- 15 TSM4000 Table Shock Mount
- VH4000 Microphone Holder for Violin/bass

### Shock Mount Rubber

- DDS0016 Rubber Mount 16 mm (0.63 in), Extra Soft
- 16 DDS0019 Rubber Mount 19 mm (0.75 in), Extra Soft

### Stands

- CAP0250 Compact Active Pole, 250 mm (9.9 in)
- 17 CAP0400 Compact Active Pole, 400 mm (15.8 in)
- CAP0750 Compact Active Pole, 750 mm (2.5 ft)
- CAP1250 Compact Active Pole, 1250 mm (4.1 ft)
- DUA0100 Stand Extension, 100 mm (3.94 in)
- DUA0250 Floor Base, Ø250 mm (9.8 in)
- DUA0500 Stand Extension, 500 mm (19.7 in)
- 18 FGS4000 Flamingo Grand, Single Pole
- 19 FGT4000 Flamingo Grand Twin, Double Pole
- FJS4000 Flamingo Junior Short, Single Pole
- SJD4000 Swivel Joint, Double
- SJS4000 Swivel Joint, Single



Flamingo stands are slender floor stands. The connector versions of all the DPA compact microphones can be plugged straight into the top of the stand on a flexible gooseneck, with an output appearing on an XLR in the other end of the tube. Options for the flamingo stands include twin poles for double rigging and extension sections for the adjustable base.

4023 Compact Cardioid on FGS4000 Flamingo Stand.