



#### 4015A, 4015A Wide Cardioid Microphone

- Low profile wide pickup area
- Natural reproduction
- Directional ambience pickup
- Exceptional for vocal

Expand your horizon with a wider pattern If you are already a DPA 4011 devotee, you will discover an exciting alternative in our wide cardioid microphones. The phantom powered DPA 4015A wide cardioid differs in its polar pattern and is the perfect fill-in between an omni and a more directional microphone. Sometimes a conventional cardioid pattern just isn't quite open enough, such as when recording instruments with complex radiation patterns. In those instances, the generous polar pattern of our Compact Wide Cardioids allows you to pick up a broader sound field and more accurately capture the full breadth of a stirring performance.

Limitless applications

Recording orchestras or other ensembles sometimes requires a compromise between blending in the room reverberation and a more precise localization. The wide cardioid (also known as hemispheric) design covers a greater sound angle and is an excellent choice for grand piano, guitar, marimba, and percussion, or as a spot mic for groups in a symphony orchestra. Likewise, it is an excellent speech, dubbing, or vocal mic as its enhanced richness on the bass end nicely compliments many voices.

Completely linear, even off-axis

The off-axis characteristics of the 4015A are totally linear, a unique quality when it comes to authentic sound reproduction. Any leakage that occurs from off-axis sound sources is still a faithful reproduction of these sounds, just softly attenuated.

Specialists in extreme sound levels

DPA's wide cardioid microphones are capable of handling extremely high sound pressure levels before clipping occurs. The 4015A even includes a 20 dB pad switch in the center of the XLR connector to prevent overloading of the mic amp.

Also available as matched stereo pair and surround kit

The ST4015A stereo pair is supplied in a specially designed PeliTM Case, the stereo matching is free of charge.

The SU4015A Surround Kit is supplied in a specially designed PeliTM Case, the surround matching is free of charge.

For more information please visit: www.dpamicrophones.com

### 4015A, 4015A Wide Cardioid Microphone

Directional characteristics:

Wide cardioid

Principle of operation:

Pressure gradient

Cartridge type:

Pre-polarized condenser

Frequency range: 20 Hz to 20 kHz

Frequency range, ± 2 dB:

40 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)

Equivalent noise level, ITU-R BS.468-4: Typ. 25 dB (correct with the attenuator in 0 dB

or -20 dB setting)

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

dB SPL):

Typ. 76 dB(A)

Total Harmonic Distortion (THD):

< 1 % up to 139 dB SPL peak

Minimum load impedance:

2 kohm

Dynamic range:

Typ. 121 dB

Max. SPL, peak before clipping:

159 dB

Filters: 0 dB / -20 dB

Output impedance:

< 200 ohm

Cable drive capability:

100 m (328 ft)

Output balance principle:

Impedance balancing with Active Drive

Common Mode Rejection Ratio (CMRR):

> 60 dB

Power supply (for full specifications):

48 V Phantom power (± 4 V)

Current consumption:

2.8 mA

Connector:

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

Pin 3: - phase

Color:

Matte black

Weight:

158 g (5.6 oz)

Microphone diameter:

19 mm (0.75 in)

Capsule diameter:

19 mm (0.75 in)

Length:

170 mm (6.7 in)

Output voltage, RMS:

> 5 V

Polarity:

+V at Pin 2 for positive sound pressure

Temperature range:

-40 °C to 45 °C (-40 °F to 113 °F)

Relative Humidity (RH):

Up to 90%

Matching tolerance:

± 1 dB

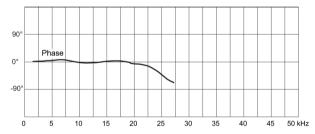
Phase deviation for kit:

< 10°

# **Diagrams**

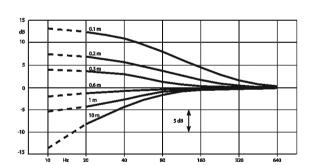
## 4015A, 4015A Wide Cardioid Microphone

### Phase response of DPA 4015A



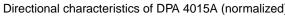
Phase response of DPA 4015A

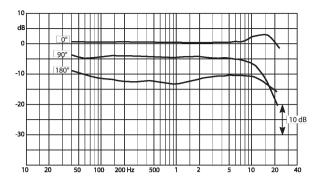
The proximity effect exhibited by the DPA 4015A



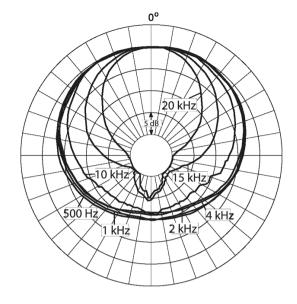
The proximity effect exhibited by the DPA 4015A

On and off axis frequency response of DPA 4015A measured at Directional characteristics of DPA 4015A (normalized) 60 cm





On and off axis frequency response of DPA 4015A measured at 60 cm



Directional characteristics of DPA 4015A (normalized)



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