



## 4060 Miniature Omnidirectional Microphone

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### Description

The 4060 is a versatile miniature, perfect for use with wireless systems in a wide range of theatre, broadcast and film applications. It is especially suited to capturing nuanced speech but is also a fantastic solution for close-miking instruments.

This mic exhibits an exceptionally accurate omnidirectional pattern and therefore does not need to be aimed directly at the sound source to achieve quality pickup. The omnidirectional pattern makes it less sensitive to handling noise as well as pop and wind noise.

The mic handles sound pressure levels up to 134 dB before 10% THD occurs. It exhibits very low self-noise, making it well suited as a lavalier mic mounted in a clip mounted on the chest, where it provides a good balance between signal vs. noise.

Available in four colors: black, brown, beige and white.

An even more robust, heavy-duty version is also available:

>> 4660 Heavy Duty Omni Mic, Normal SPL

### Features

- Exceptional audio quality
- Uniform, consistent sound between DPA mics
- Extremely rugged and reliable
- Small and unobtrusive; perfect for flexible and easy concealment
- Large selection of clips, windscreens, grids and other accessories
- Modular adapter system fits most professional wireless systems

### CORE by DPA

All the 4060 Series Omnidirectional Miniature Mics come with CORE by DPA, a powerful technology at the heart of our miniature microphones. CORE minimizes distortion across the entire dynamic range, increasing audio clarity and openness.

>> About CORE

### What's in the box

- 1 4060 Miniature Omnidirectional Microphone, Normal SPL
- 1 (attached) Soft Boost Grid for 4060 Series (DUA6001, DUA6003, DUA6005, DUA6017)
- 1 High Boost Grid for 4060 Series (DUA6002, DUA6004, DUA6006, DUA6018)

### Application guide

#### Placement guide

Sound (in this case voice) varies depending on the placement of the microphone on the body.

>> The benefits and consequences of different placements

#### Assembly guide

The microphone comes with the Soft-Boost Grid attached. Pull gently to remove. To reattach (or attach the High-Boost Grid), press the grid into place on the microphone housing.

To attach an adapter to the MicroDot connector, screw on gently yet firmly until you hear a click.

#### Cleaning guide

The cable and protection grid are the only parts that may be cleaned. Do not use any kind of cleaning fluid other than demineralized water. Avoid all kinds of spray or fluids containing chemical components to remove static electricity on or close to the microphone as this could cause damage to the electret layer. When mounting a 4060 Series Miniature Microphone directly on or close to the skin of a performer, care should be taken to avoid sweat from running into the microphone. If the microphone has been exposed to sweat, it must be rinsed out in demineralized water and left to dry out to recover its original specifications. Drying out the microphone between exposures to humidity will also help to extend its lifetime. If the microphone fills up with water it will not be damaged but can possibly turn deaf while the water is captured inside, behind the protection grid. Remove the water by shaking the microphone or drying it with a piece of lint free cloth.

#### Cleaning the microphone grid

During use in environments where the microphone is exposed to makeup or dusty materials, the grid may get clogged up. Make sure the grid is dry before re-mounting it on the mic housing.

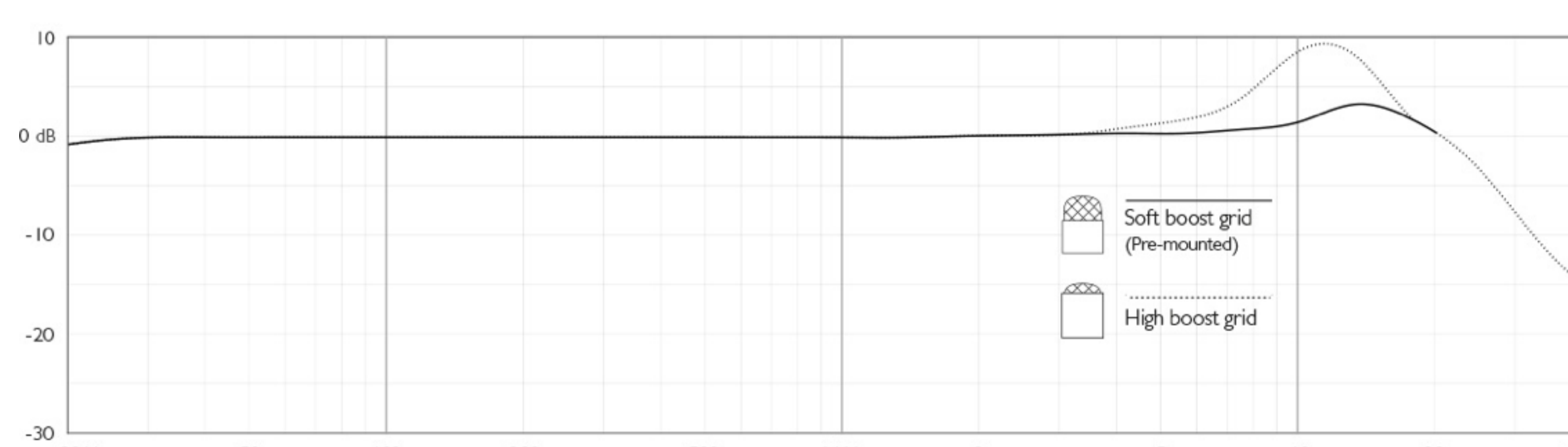
#### Cleaning the microphone cable

Residue from tape, glue or makeup on the cable must be removed after use. Leaving these substances on the cable over longer periods of time may etch into the cable jacket and will make the cable more susceptible to breaks. The cable can easily be cleaned using organic oil (e.g. olive oil) or lukewarm, demineralized water. Do not bend the cable or rub it harshly since this may stress the inner cores of the cable and cause them to break over time.

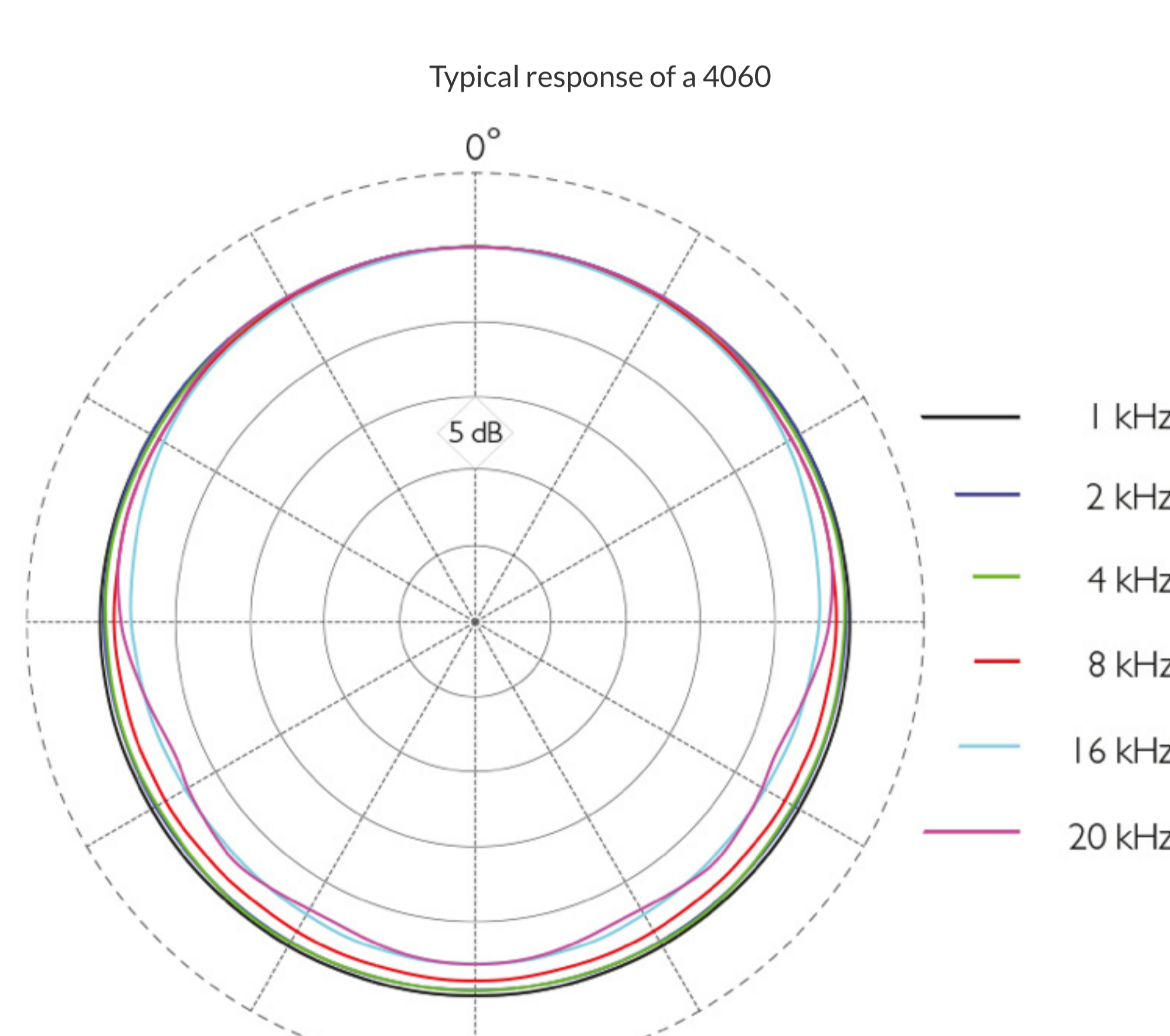
>> Proper mic hygiene

### Specifications

<b>Directional pattern</b>	Omnidirectional
<b>Principle of operation</b>	Pressure
<b>Cartridge type</b>	Pre-polarized condenser
<b>Frequency response</b>	20 Hz - 20 kHz
<b>Effective frequency range <math>\pm 2</math> dB</b>	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
<b>Sensitivity, nominal, <math>\pm 3</math> dB at 1 kHz</b>	20 mV/Pa; -34 dB re. 1 V/Pa
<b>Equivalent noise level, A-weighted</b>	Typ. 23 dB(A) re. 20 $\mu$ Pa (max. 26 dB(A))
<b>Equivalent noise level, ITU-R BS.468-4</b>	Typ. 35 dB (max. 38 dB)
<b>Distortion, THD &lt; 1% - Legacy</b>	120 dB SPL RMS, 123 dB SPL peak
<b>Distortion, THD &lt; 1% - CORE</b>	126 dB SPL RMS, 129 dB SPL peak
<b>Dynamic range - Legacy</b>	Typ. 100 dB
<b>Dynamic range - CORE</b>	Typ. 106 dB
<b>Max. SPL, THD 10%</b>	134 dB SPL peak
<b>Rated output impedance</b>	30 - 40 $\Omega$
<b>Cable drive capability</b>	Up to 300 m (984 ft) with DAD6001-BC XLR Adapter
<b>Power supply (for full performance)</b>	For wireless systems: Min. 5 V - max. 10 V through DPA adapter With DAD6001-BC, P48 (Phantom Power), Will work from 12 V
<b>Current consumption</b>	Typ. 1.5 mA (microphone), 3.5 mA with DAD6001-BC XLR Adapter
<b>Connector</b>	MicroDot, TA4F Mini-XLR, 3-pin LEMO, Mini-Jack
<b>Color</b>	Black, beige, brown or white
<b>Weight</b>	7.5 g (0.26 oz) incl. Cable and MicroDot connector
<b>Microphone diameter</b>	5.4 mm (0.21 in)
<b>Microphone length</b>	12.7 mm (0.5 in)
<b>Cable length</b>	1.8 m (5.9 ft)
<b>Polarity</b>	Positively increasing sound pressure produces positive going voltage on MicroDot pin
<b>Temperature range</b>	-40°C to 45°C (-40°F to 113°F)
<b>Relative humidity (RH)</b>	Up to 90%
<b>Sensitivity selection tolerance (at 1 kHz)</b>	$\pm 1.5$ dB



Typical response of a 4060



Typical directional characteristics of a 4060

### Accessories

#### Included

- 1 Soft Boost Grid for 4060 Series (DUA6001, DUA6003, DUA6005, DUA6017)
- 1 High Boost Grid for 4060 Series (DUA6002, DUA6004, DUA6006, DUA6018)

#### Optional

- 2-Way Dual Clip for 4060 Series Lavalier Microphone (SCM0032-B)
- 4-Way Clip for Lavalier Microphone (SCM0013-B)
- Digital Audio Interface (MMA-A)
- Concealer for Lavalier Microphone (DMM0021, DMM0521)
- Foam Windscreen for Miniature Microphones (DUA0560, DUA0566, DUA0567, DUA0568)
- Makeup Cover for Lavalier Microphone (DUA0590)
- Foam Windscreen for Lavalier Microphone, Color Mix (DUA0570)
- Lavalier Microphone Holder for String Instrument (MHS6005)
- Gooseneck Mount for 4060 Series Lavalier Microphone (GM1600)
- Accessory Kit for 4060 Series Lavalier Microphone (DAK4060)

### Adapters & connectors

DPA's adapters for wireless systems give you flexible, simple and affordable possibilities. You are no longer bound to only one wireless system.

>> Our range of adapters

In addition, DPA has fixed connections available, like LEMO 3 pin, TA4F miniXLR and MiniJack. Please visit our product configurator to learn more:

>> 4060 Series Miniature Omni Mic configurator

### Service & repair

Products from DPA Microphones are extremely durable and stable so there should not be any significant change in the specifications with time and use. If, however, you are not totally satisfied with the characteristics exhibited by these products, please contact your nearest DPA Microphones representative for further details of service and the repair facilities that are available.

### Warranty

This product is covered by a two-year limited warranty on both mechanical functionality and documented specifications as long as the items are not mistreated, abused or modified in any way.

In case of a warranty claim, your invoice is your warranty registration.

>> Additional warranty information

### CE marking

The CE mark guarantees that the product conforms to relevant directives set forth by the European Commission.

EMC directive: 2004/108/EEC

Low voltage directive: 2006/95/EC

### Environmental Policy

DPA Microphones A/S complies fully with Directive 2012/19/EC on the Waste from Electrical and Electronic Equipment (WEEE). This product should not be thrown in the garbage bin when obsolete. Instead, return it to your local DPA representative (or DPA Microphones A/S directly) who will dispose of the product in accordance with the current environmental standards.

RoHS directive: 2002/95/EC

WEEE directive: 2002/96/EC

>> Our environmental policy

### Learn more

>> Mic University - Lavalier Microphones

