

Introduction

The DPA 4090 and 4091 are discrete and versatile microphones characterised by a uniquely natural and open sound. They can be used with any instrument from electric guitar amps to acoustic guitar, piano, saxophone and wind instruments. Because of their flat frequency response the 4090 and 4091 are excellent choices for calibrating your sound system.

DPA 4090 and 4091 are omnidirectional (pressure) microphones. To ensure optimal performance of your DPA microphone please follow the simple care and maintenance instructions below.

Highly resistant materials like gold plated stainless steel, and features like the double-vent protection system are used in construction of the microphones, to avoid damage by hostile fluids.

In any case, it is still a good idea to keep the microphones away from any kind of unnecessary exposure to water and cleaning fluids and to keep the microphone element dry at all times.

Care of Microphone

To ensure optimal performance of your DPA Microphone, please bear in mind the following points with regard to mounting, microphone care and the use of accessories.

The microphone cartridge is secured to the main body housing, and no attempt should be made to remove it. If a replacement cartridge is required, contact your local DPA Microphones representative.

The tip of the 4090 and 4091 microphones is retractable to provide protection.

Using the windscreen is recommended when the microphone is used in dirty or dusty environments and when the microphones need to be protected from wind or pop-noise.

When not in use, the microphone should be kept in the case supplied.



www.dpamicrophones.com

Download the complete user's manual at www.dpamicrophones.com





Specifications

DPA 4090/4091

Directional characteristics:

Omnidirectional

Principle of operation:

Pressure

Cartridge type:

Pre-polarized condenser

Power supply:

48 V Phantom power

Frequency range, ± 2 dB:

20 Hz - 20 kHz

Sensitivity, nominal, ± 3 dB:

4090: 20 mV/Pa; -34 dB re. 1 V/Pa
4091: 6 m V/Pa; -44.5 dB re. 1 V/Pa

Equivalent noise level, A-weighted:

4090: Typ. 23 dB(A) re. 20 μ Pa (max. 26 dB(A))
4091: Typ. 26 dB(A) re. 20 μ Pa (max. 28 dB(A))

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

4090: 71 dB(A)
4091: 68 dB(A)

Total Harmonic Distortion (THD):

<1% up to 123 dB SPL peak

Polarity:

Inward movement of diaphragm produces positive going voltage on pin 2

Cable drive capability:

Up to 300 m (984 ft)

Connector:

3-pin XLR (Standard P48)

Dynamic range:

4090: Typ. 100 dB
4091: Typ. 97 dB

Max SPL, peak before clipping:

4090: 134 dB
4091: 144 dB

Output impedance:

<40 Ohm

Accessories included

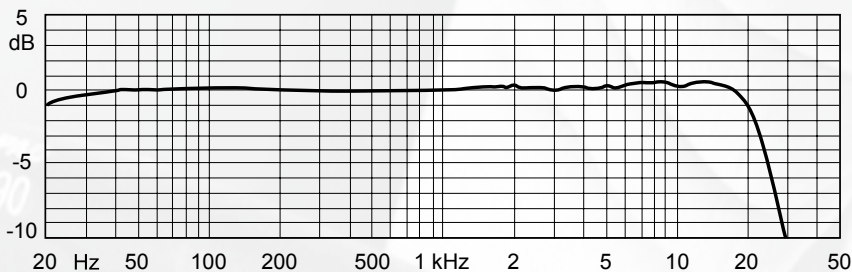
UA0639 Microphone Clip
DUA0573 Windscreen for 4090/91

Accessories available

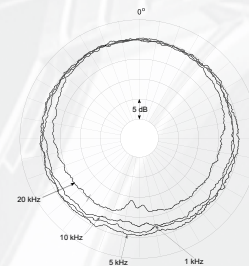
UA0836 Stereo Boom with holders
UA0837 Stereo Boom excluding holders



Typ. On-axis Frequency Response of 4090/91 in free field



Polar Pattern



Directional Characteristics (normalised)

SERVICE & REPAIR

Products from DPA Microphones are extremely stable and 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, contact your nearest DPA Microphones representative for further details of service and the repair facilities that are available.

CE-MARKING

The CE-mark guarantees that the product conforms with relevant Directives approved by the European Commission.

EMC Directive: 89/336/EC, amended by 92/31/EC and 93/68/EC

Low voltage Directive: 73/23/EC, amended by 93/68/EC



WARRANTY

All products from DPA Microphones are 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.

ENVIRONMENTAL POLICY

This product is comprised by the Waste (WEEE) directive and 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.



Headquarters:

DPA Microphones A/S
Gydevang 42-44
DK-3450 Allerød, Denmark

Ph: +45 4814 2828
Fax: +45 4814 2700

info@dpamicrophones.com
www.dpamicrophones.com

United States:

DPA Microphones, Inc.
691 Gray Mountain Drive
Lyons, CO 80540

Ph: +1 303 823 8878
Fax: +1 303 823 5830

info-usa@dpamicrophones.com
www.dpamicrophones.com

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