

## d:screet™ Necklace Microphone User Manual



### **Introduction**

The DPA d:screet™ Necklace Microphone is designed for use with wireless systems in environments like theater and television, and is especially well suited for do-it-yourself mounting by talents, for example in reality shows.

To ensure optimal performance of your d:screet Necklace Microphone, please follow the simple care and maintenance instructions. Our d:screet Necklace Microphone is designed to be resistant to humidity and moisture. We have incorporated materials like gold plated stainless steel and features like the double-vent protection system to ensure a robust and stable construction.

## Mounting

Push the clasp parts together to click-lock. To unlock, push the release button and draw apart.



Turn the necklace so the cable relief on the back points downwards. This will make the microphone element on the front point outwards below the throat.

## 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 the d:screet 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 gets filled up with water it will not be damaged, but possibly turn deaf while the water is captured inside the microphone, behind the protection grid. Remove the water by shaking the microphone or drying it with a piece of lint free cloth.

Note: 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 Miniature Microphone between exposures to humidity will also help to extend its lifetime.

## **Cleaning the microphone grid**

During use in environments where the microphone is exposed to makeup or dusty materials, the grid may get clogged up. Remove the microphone grid from the microphone element and clean the grid using a soft cloth and demineralized water only. Make sure the grid is dry before re-mounting it on the microphone 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 break. The cable can easily be cleaned using organic oil (e.g. olive oil) or lukewarm, de-mineralized 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.

## **Microphone grid**

The d:screet Necklace Microphone is supplied with a high boost grid fitted. This is to compensate for the difficult acoustic sound field under the chin of the performer, where a significant high frequency drop occurs. The high boost grid gives approximately a 10 dB boost at 12 kHz. Without the grid mounted, the microphone is linear.

## **Microphone element**

The diaphragm in the microphone element is the most sensitive part of the unit, and must be left untouched to preserve its original characteristics. Do not spray any substances such as hair spray directly into the microphone and avoid getting makeup or paint on the microphone element and housing.

## **Correct treatment of the microphone cable**

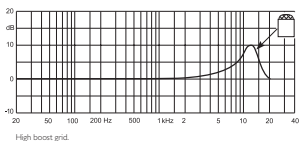
The cable is usually longer than required for its actual purpose. Make sure that superfluous cable is wound up in soft loops (preferably 6 – 8 cm (2.4 – 3 in) in diameter). Avoid kinks in the cable.

## Correct use of adapters and MicroDot connectors

To provide users with safe and compact mounting of connectors, all our d:screet Miniature Microphones are fitted with the MicroDot connector. A broad range of adapters is offered as optional accessories for most wireless systems for professional use. A connector-tightening tool is supplied with each adapter and should be employed whenever the MicroDot connector needs to be tightened safely onto the adapter. Never attempt to loosen or tighten the connector by the cable or its strain relief. Some wireless systems require the use of electronic components inside the adapter to optimize the signal level, the DC-offset filtering, and powering of the built-in microphone preamplifier. Always use the adapters from DPA Microphones with the wireless systems to ensure the correct electronic circuit. Do not use non-standard adapters or connectors as you might damage the microphone preamplifier.

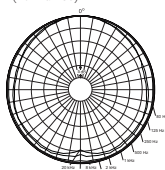
## Specifications for d:screet™ Necklace Microphone

### On-axis Frequency Response



### Polar Pattern

Directional characteristics (normalized)



### Directional characteristics:

Omnidirectional

### Principle of operation:

Pressure

### Cartridge type:

Pre-polarized condenser element with vertical diaphragm

### Frequency range, +/- 2 dB:

High boost grid: 20 Hz – 20 kHz, 10 dB boost at 12 kHz.

**Sensitivity, nominal +/- 3 dB at 1 kHz:**

6 mV/Pa; -44 dB re. 1 V/Pa

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

Typ. 26 dB(A) re. 20  $\mu$ Pa (max. 28 dB(A))

**Equivalent noise level, ITU-R BS.468-4:**

Typ. 38 dB (max. 40 dB)

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

68 dB(A)

**Total Harmonic Distortion (THD):**

< 1 % THD up to 123 dB SPL peak; < 1 % THD up to 120 dB SPL RMS sine

**Dynamic range:**

Typ. 97 dB

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

144 dB

**Output impedance:**

30 – 40  $\Omega$

**Cable drive capability:**

Up to 300 m (984 ft)

**Power supply:**

For wireless systems: Min. 5 V – max. 50 V through DPA adapter. With DAD6001-BC/DAD6024/DAD4099: 48 V phantom power  $\pm$ 4 V for full performance.

**Connector:**

MicroDot

**Color:**

Black, White or Brown

**Weight:**

13 g (0.46 oz) incl. cable and MicroDot connector

**Microphone diameter:**

5.4 mm (0.21 in)

**Necklace length:**

47 or 53 cm (18.5 or 20.7 in)

**Microphone length:**

12.7 mm (0.5 in)

**Cable length:**

1.1 m (3.6 ft)

**Cable diameter:**

1.6 mm (0.06 in)

**Polarity:**

Positively increasing sound pressure produces positive going voltage on MicroDot pin

**Temperature range:**

-40  $^{\circ}$ C to 45  $^{\circ}$ C (-40  $^{\circ}$ F to 113  $^{\circ}$ F)

**Relative Humidity (RH):**

Up to 90%

## **Service & Repair**

Products from DPA Microphones are extremely stable and there should not occur any significant change in the specifications with time and use. If, however, you are not totally satisfied with the characteristics exhibited by this product, contact your nearest DPA Microphones representative for further information on details of service and the available repair facilities.

## **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.

RoHS directive: 2002/95/EC

WEEE directive: 2002/96/EC

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Product features and specifications are subject to change without notice.

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[www.dpamicrophones.com/necklace](http://www.dpamicrophones.com/necklace)

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