



#### Introduction

Congratulations on your new 4560 CORE Binaural Headset Microphone.

Immersive sound is an emerging market and there are many possible uses for the 4560 CORE Binaural Headset Microphone. The 4560 is an appealing solution for applications such as sound system documentation, soundscape analysis, sound quality assessment, as well as sound for theatrical productions, podcasts and gaming.

The 4560 is made from a handpicked stereo pair of 4060 Miniature Omnidirectional Microphones. With the use of our head and ears as natural spacers/shadows and reflectors we can create a sonic 3D print of the sound around us. This is based on the theory of the HRTF, which also means that the recorded material must be listened to via headphones or converted to a relevant 3D format that includes the height information.

Learn more: **dpa**microphones.com/binaural-recording-techniques

The two 4060 mics are mounted on a flexible, unobtrusive headset, which is ergonomically designed to fit comfortably. The headset adjusts easily to fit any ear size as well as head shape.







# **Getting started**



Two sizes of foam windscreens are supplied with the 4560 to secure the mics' position in the ears and to offer extra damping of wind noise. Gently place the desired size onto the microphones.

# Adjusting frame size



Before adjusting the frame size, you need to loosen the braided sleeving covering the cable. Remove the clothing clip, grab the bottom of the sleeving and pull it gently upwards, smoothing it up the entire length of the cable to make it loose at the top.



To increase the frame size, hold the cable and frame behind the earhooks and slowly pull the ear hooks away from each other to the desired size.



To decrease the frame size, hold the coils on the headset frame and slowly pull the coils away from each other to the desired size. After making the frame adjustments, starting from the top, smooth the entire braided sleeving back down the cable. Replace the clothing clip.

# Mounting on the head



Place the microphones gently in your ear canals. They should not be pressed tightly into the ears because this might affect the sound.



Make sure the earhooks sit comfortably and securely around the ears.

# Adjusting the cable



To make sure the microphones stay in place, use the clothing clip. This relieves the weight of the cable on the headset.



Make a little loop with the cable so there is enough slack to turn your head from side to side.

# **Connecting the 4560**



The 4560 needs bias voltage (DC supply) and connects to any audio device (like the MMA-A Digital Audio Interface) or transmitter via MicroDot connections. Please note: The white MicroDot corresponds to the mic with the white marker (near the ear).



Make sure you correctly plug the connections into the right/left device inputs. (If the mic with the white marker is in your right ear, the white connection should be plugged into the right input.)

## **Specifications**

### **Directional pattern**

Omnidirectional

### Cartridge type

Pre-polarized condenser

**Effective frequency response** 20 Hz - 20 kHz

# Sensitivity, nominal ±3 dB at I kHz

20 mV/Pa; -34 dB re. | V/Pa, ±1.5 dB pair **Equivalent noise level, A-weighted** Typ. 23 dB(A) re. 20 µPa (max. 26 dB(A))

Distortion, THD < 1%

126 dB SPL RMS, 129 dB SPL peak

Dynamic range

106 dB

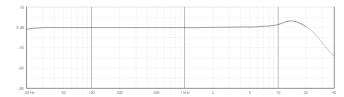
Max. SPL, THD 10%

134 dB SPL peak

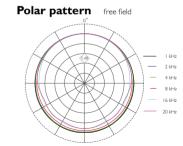
Connector

MicroDot

#### Frequency response



Typical frequency response.



## Accessories

Foam windscreens
DUA0531B

Foam windscreen





Adapter for MicroDot to 3-pin XLR DAD6001-BC Optional



MMA-A
Digital Audio Interface
Optional



#### General maintenance

This headset microphone is resistant to high levels of humidity and water. For optimal performance, the microphone capsule should be kept dry. Keep the microphone away from cleaning fluids. Do not use sprays or fluids containing chemicals that could remove static electricity on or close to the microphone. Doing this could cause permanent damage.

Only demineralized water should be used when rinsing the microphone capsule. Afterwards, the microphone should be left to air-dry.

Please refer to our instructions and videos explaining the cleaning process. **dpamicrophones.com/wash-miniature** 



#### Warranty

The 4560 Binaural Headset Microphone is covered by a twoyear limited warranty.

#### Service & repair

If you are not satisfied with the characteristics exhibited by this product, please contact your nearest DPA Microphones representative for support.

#### **CE** marking

This product conforms to all relevant directives approved by the European Commission.

Product features and specifications are subject to change without notice.



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