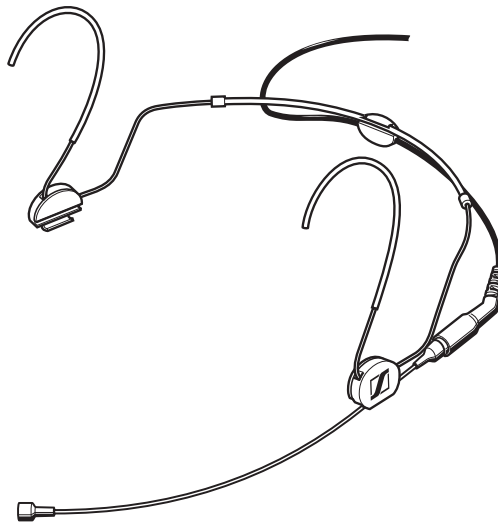
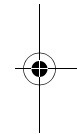
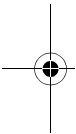
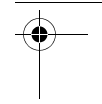
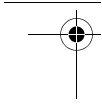
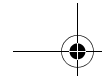




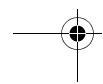
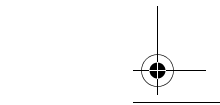
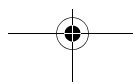
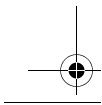
HSP 2 HSP 4

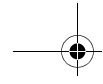
Bedienungsanleitung
Instructions for use
Notice d'emploi
Istruzioni per l'uso
Instrucciones para el uso
Gebruiksaanwijzing





Bedienungsanleitung.....	3
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HSP 2/HSP 4

High-quality back-electret condenser headmics, designed for professional “hands free” applications. The adjustable neckband is visually unobtrusive and very comfortable to wear. The 12 available HSP variants differ in pick-up pattern, colour and connector.

There are two pick-up patterns available:

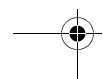
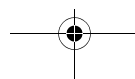
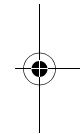
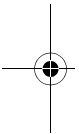
HSP 2: omni-directional

HSP 4: cardioid



Features

- Individually adjustable to all head sizes
- Neckband design keeps the microphone clear from shirt-collar or clothing
- Thin microphone boom, interchangeable
- Microphone boom can be attached to the left or right side
- Angle of microphone boom can be adjusted in three steps
- Microphone boom is adjustable in length
- Connection cable can easily be interchanged
- All metal parts are coated in a physical vapour deposition process (scratch-resistant)





Delivery includes

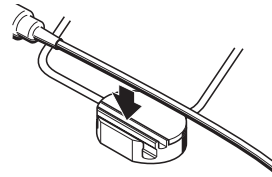
- Boom microphone
- Neckband
- Neckband connecting cable
- Plastic transport case, foam-lined with cut-outs
- Instructions for use
- Warranty Certificate



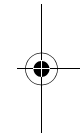
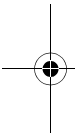
Attaching the microphone boom

The neckband has two holders which are designed so that the microphone booms can be worn on either side of the mouth.

To change the microphone boom, carefully lever it out of the holder. To attach the microphone boom, press it into the holder until it snaps in. The upper round recess is for the HSP 2

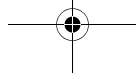


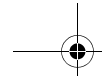
(\varnothing 1.1 mm). The lower square recess at the front keeps the HSP 4 in a fixed, non-rotating position, thus ensuring that the sound inlet is reliably directed towards the mouth.



Adjusting the neckband

You can adjust the neckband to fit all head sizes. To do so, change the length of the neckband by pushing in or pulling out the ear bows.



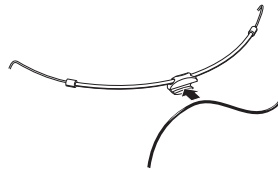


Cable holder

Attach the microphone cable to the holder in the centre of the neckband.

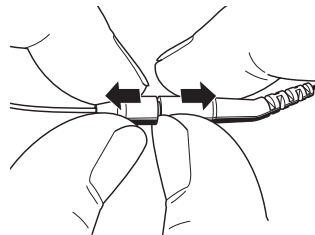
Note:

When attaching the thin cable, make sure you also press the small cable sleeve into the holder or the cable will fall out.



Changing the microphone

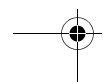
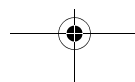
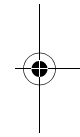
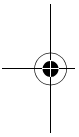
The connection between the microphone boom and the microphone cable is very tight. To loosen this connection, insert your fingernail into the joint and then pull the connector and the socket apart as shown.



Note:

When pulling apart, make sure you hold the thick end of the connector and the socket (NOT the cable).

Pulling the thin microphone boom or the cable sleeve can damage the microphone boom or cable. This will invalidate the Sennheiser warranty





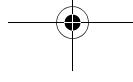
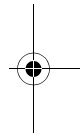
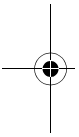
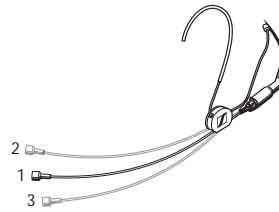
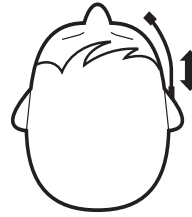
Positioning the microphone capsule (HSP 2)

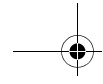
It is best to keep the microphone capsule at the side of the mouth to minimise the risk of popping noises caused by plosives from the mouth.

English

To position the microphone capsule, push the microphone boom backwards or forwards in the holder.

To adjust the angle of the microphone boom, move it to one of the three possible positions until it snaps in.



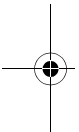
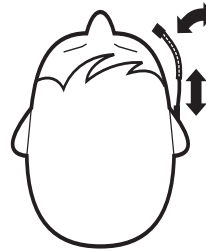


Positioning the microphone capsule (HSP 4)

The microphone capsule has a cardioid pick-up pattern and is best placed directly at the corner of the mouth.

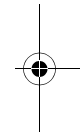
Note:

Do not position the microphone directly in front of your mouth as it will pick up your breathing and plosive noises from your mouth.



To position the microphone capsule, push the microphone boom backwards or forwards in the holder.

The microphone capsule can be precisely positioned using the flexible gooseneck.



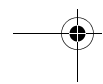
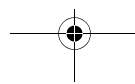
Cleaning the pop protection (HSP 4 only)

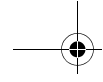
The pop protection is integrated into the microphone capsule of the HSP 4. To clean or replace the pop protection, lever it from the capsule.



Note:

When attaching the pop protection, it is important not to cover the sound inlet!





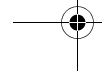
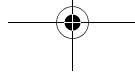
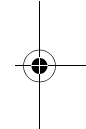
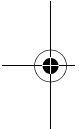
Accessories

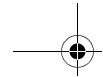
The following accessories and/or replacement parts are available for the HSP 2 / HSP 4:

Replacement parts for HSP 2



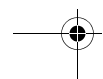
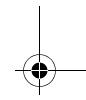
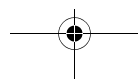
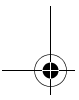
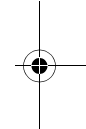
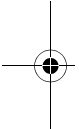
Part	Cat. No.
Neckband with two holders, anthracite	511709
Neckband with two holders, beige	511710
Omni-directional boom microphone, beige	511711
Omni-directional boom microphone, anthracite	511712
Cardioid boom microphone, beige	511713
Cardioid boom microphone, anthracite	511714
Windshield cap for HSP 4, anthracite	511715
Windshield cap for HSP 4, beige	511716
OFC copper/Kevlar cable with 3-pin screw special connector, black	511717
OFC copper/Kevlar cable with 3-pin screw special connector, beige	511718
Steel wire cable with 3.5 mm lockable mini-jack, black	511719
Steel wire cable with 3.5 mm lockable mini-jack, beige	511720
Steel wire cable with open ends, black	511721
Steel wire cable with open ends, beige	511722
Plastic transport case	511723
MZA 900 P phantom power adaptor	500226
MZC 2-1 cap, short, anthracite	085842
MZC 2-2 cap, long, anthracite	085839
MZC 2-1 cap, short, beige	085843
MZC 2-2 cap, long, beige	085840
MZW 2 windshield, black	047185
MZW 2 windshield, beige	047186





Replacement parts for HSP 4

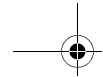
Part	Cat. No.
Neckband with two holders, anthracite	511709
Neckband with two holders, beige	511710
Omni-directional boom microphone, beige	511711
Omni-directional boom microphone, anthracite	511712
Cardioid boom microphone, beige	511713
Cardioid boom microphone, anthracite	511714
Windshield cap for HSP 4, anthracite	511715
Windshield cap for HSP 4, beige	511716
OFC copper/Kevlar cable with 3-pin screw special connector, black	511717
OFC copper/Kevlar cable with 3-pin screw special connector, beige	511718
Steel wire cable with 3.5 mm lockable mini-jack, black	511719
Steel wire cable with 3.5 mm lockable mini-jack, beige	511720
Steel wire cable with open ends, black	511721
Steel wire cable with open ends, beige	511722
Plastic transport case	511723
MZA 900 P phantom power adaptor	500226



Overview of product variants

English

Microphone	(Cat. No.)	3-pin screw special connector	ew 3.5mm lockable mini-jack	Open-ended cable	Platinum cable	Flexible gooseneck	Anthracite	Beige
HSP 2	(009862)	√			√		√	
HSP 2-3	(009863)	√			√			√
HSP 2-ew	(009866)		√				√	
HSP 2-ew-3	(009872)		√					√
HSP 2-5	(009868)			√			√	
HSP 2-5-3	(009869)			√				√
HSP 4	(009864)	√			√	√	√	
HSP 4-3	(009865)	√			√	√		√
HSP 4-ew	(009867)		√			√	√	
HSP 4-ew-3	(009873)		√			√		√
HSP 4-5	(009870)			√		√	√	
HSP 4-5-3	(009871)			√		√		√

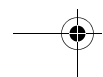
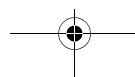
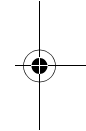
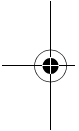


Specifications



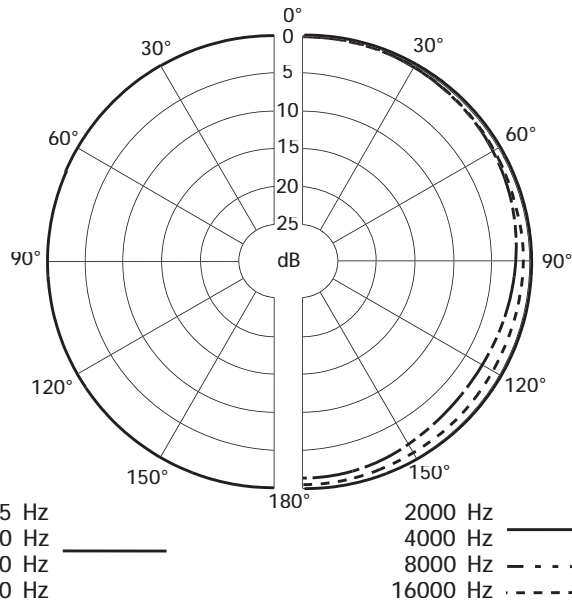
Specifications HSP 2

Frequency response	20 – 20,000 Hz \pm 3 dB
Pick-up pattern	omni-directional
Nominal impedance (1 kHz)	1 k Ω
Min. terminating impedance	4.7 k Ω
Sensitivity	2 mV/Pa \pm 3 dB
Diametre of mic capsule	4.8 mm
Max. sound pressure level	150 dB
Equivalent noise level	28 dB (A)
Supply current	approx. 250 μ A
Power supply	4.5 – 15 V
Cable length	1.6 m
Diametre of boom arm	1.1 mm
Weight	2.1 g
Connector	see "Overview of product variants"
Neckband	
Diametre	1.1 mm
Weight	4.4 g

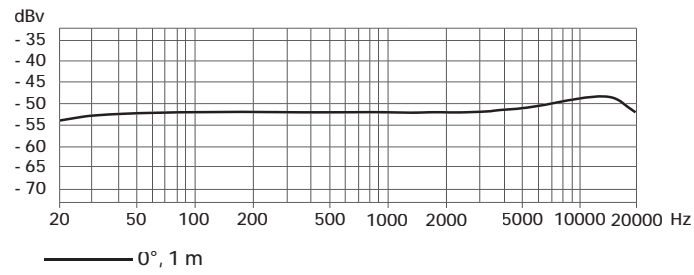


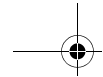
Polar diagram HSP 2

English



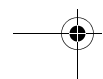
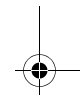
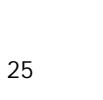
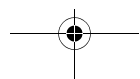
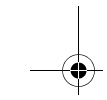
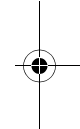
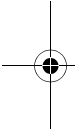
Frequency response curve HSP 2

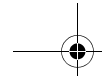




Specifications HSP 4

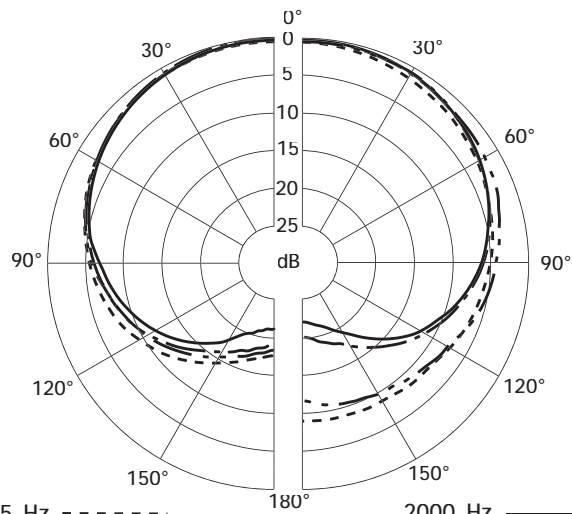
Frequency response	40 – 20,000 Hz ±3 dB
Pick-up pattern	cardioid
Nominal impedance (1 kHz)	1 kΩ
Min. terminating impedance	4.7 kΩ
Sensitivity	4 mV/Pa ± 3 dB
Diametre of mic capsule	8.4 mm
Max. sound pressure level	150 dB
Equivalent noise level	37 dB (A)
Supply current	approx. 250 µA
Power supply	4.5 – 15 V
Cable length	1.6 m
Diametre of boom arm	2.0 mm
Weight	4.8 g
Connector	see "Overview of product variants"
Neckband	
Diametre	1.1 mm
Weight	4.4 g





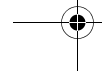
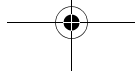
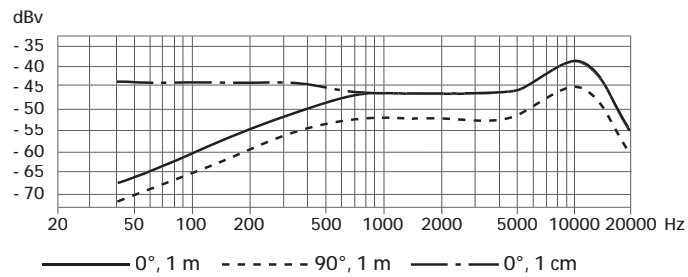
Polar diagram HSP 4

English



- | | | | |
|---------|-----------|----------|-----------|
| 125 Hz | ----- | 2000 Hz | ————— |
| 250 Hz | — · — · — | 4000 Hz | — · — · — |
| 500 Hz | — · — · — | 8000 Hz | — · — · — |
| 1000 Hz | ————— | 16000 Hz | · - - - - |

Frequency response curve HSP 4





Konformitätserklärung

Sennheiser electronic GmbH & Co. KG erklären, dass dieses Gerät die anwendbaren CE-Normen und Vorschriften erfüllt.

Approval

Sennheiser electronic GmbH & Co. KG declare that this device is in compliance with the applicable CE standards and regulations.

Certification

Sennheiser electronic GmbH & Co. KG déclarons que cet appareil est en conformité avec les normes CE.

Certificazione

Sennheiser electronic GmbH & Co. KG dichiara che questo apparecchio risponde alle normative e alle prescrizioni CE applicabili.

Autorizacion

Sennheiser electronic GmbH & Co. KG declara que este aparato cumple las normas y directrices de la CE aplicables.

Vergunning

Sennheiser electronic GmbH & Co. KG verklaren, dat dit toestel voldoet aan de toepasselijke CE-normen en voorschriften.

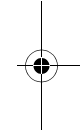
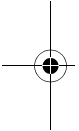
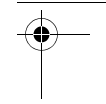
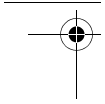
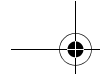
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