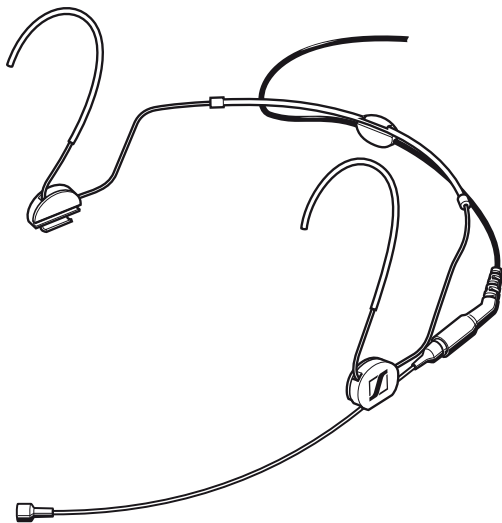


# HSP 2 HSP 4

Instructions for use



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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)

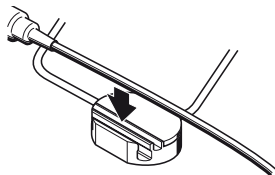
## Delivery includes

- 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 reattach 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.

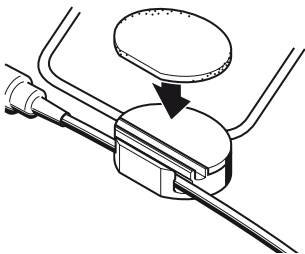


To benefit for a long time from the reliable and firm guidance through the holder you should not turn the microphone boom in the recess. Always carefully lever it out of the holder and then let it snap in again.

### Note:

In order to ensure the adjustability of the angle of the microphone boom, maintain a minimum distance of 1 – 2 cm between the holder and the cable connection.

The cushion delivered with your HSP 2/HSP 4 improves the wearing comfort. If desired, attach the cushion to your microphone boom fastener.



## 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.

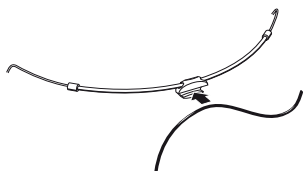


## Cable holder

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

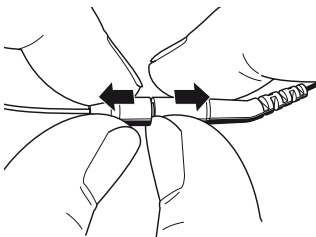
### Note:

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).

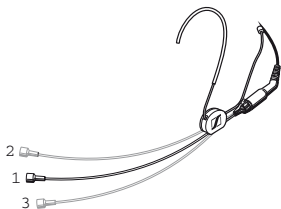
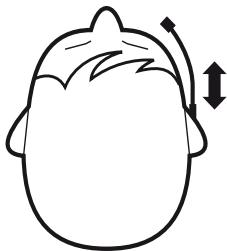
Pulling the thin microphone boom or the cable sleeve can damage the microphone boom or cable. This will invalidate the Sennheiser warranty.

## 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.

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.

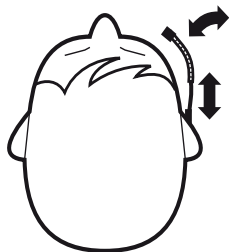


## Positioning the microphone capsule (HSP 4)

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. Make sure that the windshield is put on.



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
Omni-directional boom microphone HSP-M, anthracite	515280
Omni-directional boom microphone, HSP-M, beige	515281
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
Cardioid boom microphone, beige	511713
Cardioid boom microphone, anthracite	511714
Cardioid boom microphone HSP-M, anthracite	515282
Cardioid boom microphone HSP-M, beige	515283
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

## Replacement parts for HSP 2 and HSP 4

Part	Cat.No.
Set of holders, anthracite	515609
Set of holder, beige	515608
Cushion for holder, anthracite	515287
Cushion for holder, white	515288
Neckband HSP-M, anthracite	515278
Neckband HSP-M, beige	515279

## Overview of product variants

Microphone	Feature (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

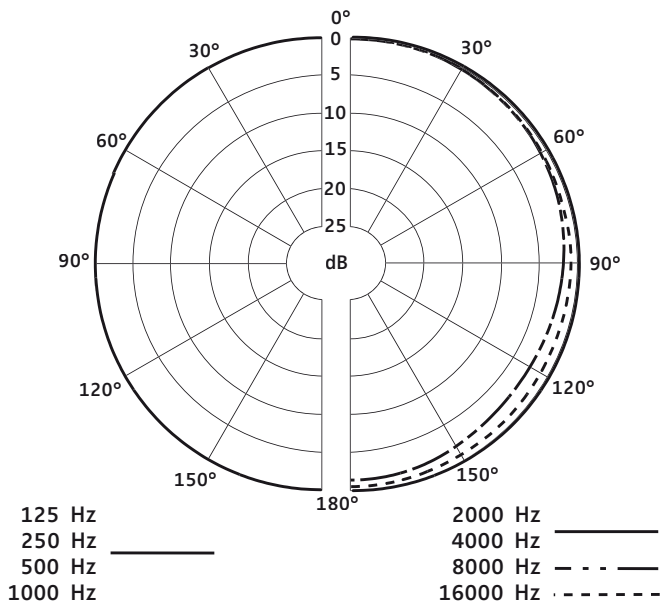
### Specifications HSP 2

Frequency response	20 – 20,000 Hz $\pm$ 3 dB
Pick-up pattern	omni-directional
Nominal impedance (1 kHz)	1 k $\Omega$
Min. terminating impedance	4.7 k $\Omega$
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 $\mu$ A
Power supply	4.5 – 15 V
Operating temperature	-10 °C ... +50 °C
Cable length	1.6 m
Diametre of boom arm	1.1 mm
Weight	2.1 g
Connector	see "Overview of product variants"

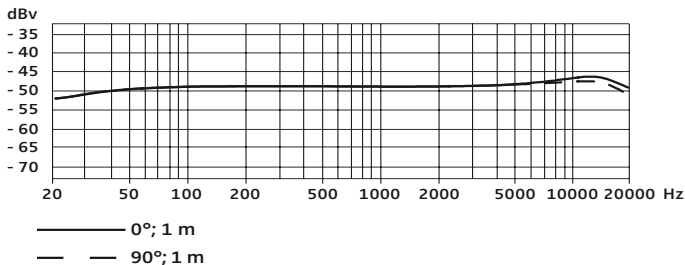
### Neckband

Diameter	1.1 mm
Weight	4.4 g

## Polar diagram HSP 2



## Frequency response curve HSP 2



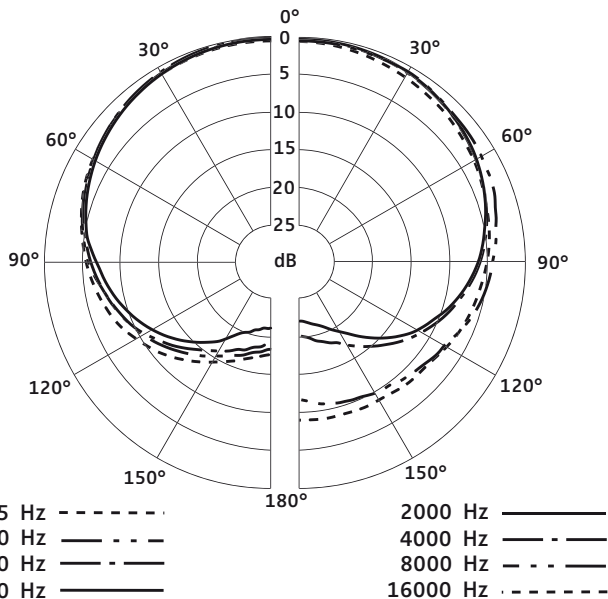
## Specifications HSP 4

Frequency response	40 – 20,000 Hz $\pm$ 3 dB
Pick-up pattern	cardioid
Nominal impedance (1 kHz)	1 k $\Omega$
Min. terminating impedance	4.7 k $\Omega$
Sensitivity	4 mV/Pa $\pm$ 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 $\mu$ A
Power supply	4.5 – 15 V
Operating temperature	-10 °C ... +50 °C
Cable length	1.6 m
Diametre of boom arm	2.0 mm
Weight	4.8 g
Connector	see "Overview of product variants"

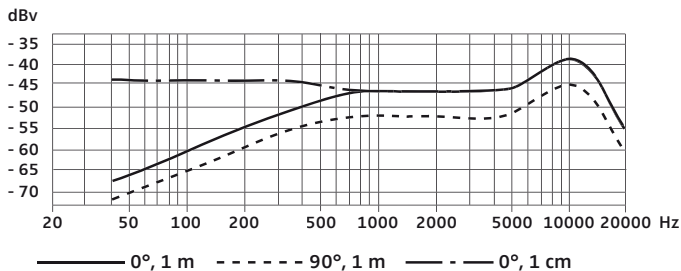
## Neckband

Diametre	1.1 mm
Weight	4.4 g

## Polar diagram HSP 4



## Frequency response curve HSP 4



# Manufacturer declarations

## Warranty

2 years

## CE Declaration of Conformity

CE 0682 Ⓢ

This equipment is in compliance with the essential requirements and other relevant provisions of Directives 1999/5/EC, 89/336/EC or 73/23/EC. The declaration is available on the internet site at [www.sennheiser.com](http://www.sennheiser.com).

Before putting the device into operation, please observe the respective country-specific regulations!

## WEEE Declaration



Your Sennheiser product was developed and manufactured with high-quality materials and components which can be recycled and/or reused. This symbol indicates that electrical and electronic equipment must be disposed of separately from normal waste at the end of its operational lifetime.


Please dispose of this product by bringing it to your local collection point or recycling centre for such equipment. This will help to protect the environment in which we all live.

## Batteries



The supplied rechargeable batteries can be recycled. Please dispose of rechargeable batteries as special waste or return them to your specialist dealer. In order to protect the environment, only dispose of exhausted batteries.





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