

# HD 800 HD 800 S

INSTRUCTION MANUAL



## The Ultimate Headphones



A modern classic, Sennheiser's reference class HD 800 headphones deliver sound that is as natural as possible and true in every detail. Improving on a seemingly perfect formula is not a task undertaken lightly, but Sennheiser's engineers have succeeded in enhancing still further the sound reproduction in the open, circum-aural HD 800 S.

The striking industrial design combines form and function seamlessly, the layered metal and plastic headband construction attenuating vibrations to the ear cups while the handmade microfiber ear pads offer exceptional comfort for even long periods of listening enjoyment.

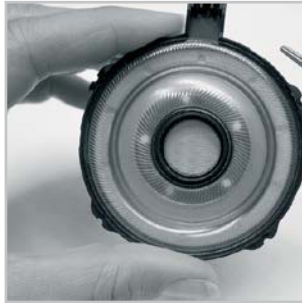
Crafted for perfection, the HD 800 and the HD 800 S are precision-built in Germany from only the finest materials and components. The transducer is encased by stainless steel, while the headband and headphone mounting utilizes the most advanced materials developed in the aerospace industry for high strength with minimal weight.

The new HD 800 S offers even better high precision connectivity options and is now supplied with two connection leads, a 6.3 mm connector and a XLR-4 balanced cable to offer even better quality sound from sources with balanced outputs such as the Sennheiser HDVD 800 headphones amplifier.

### Absorber technology of the HD 800 S

The enhanced sound reproduction of the HD 800 S is achieved through the addition of the innovative absorber technology that was pioneered in the Sennheiser IE 800 – a breakthrough that preserved the audibility of very high frequency sounds by eliminating a phenomenon known as the "masking effect", where the human ear struggles to hear frequencies of sound when lower frequencies of a higher volume occur at the same time. By absorbing the energy of the resonance, Sennheiser's patented absorber technology prevents any unwanted peaks and allows all frequency components – even the finest nuances – in the music material to become audible. This innovation was a key element in making the IE 800 the world's best sounding in ear headphone, and in the HD 800 S it helps to bring even greater purity and precision.

Such enhancements build on the formidable achievements of the classic, with the 56-mm sound transducer – the largest ever used in dynamic headphones. The unique ear cup design directs sound waves to the ear at a slight angle to create an impressively natural and spatial listening experience.



While much appears the same, the enhanced performance within is revealed by a distinctive new look, with the silver finish of the 2009 classic HD 800 making way for high-class matt black for the HD 800 S.

### Features HD 800 and HD 800 S

- Reference class in wired headphones
- Open, circum-aural dynamic stereo headphones
- Natural hearing experience – realistic and natural sound field with minimal resonance
- Biggest transducers ever used in headphones up to today – new innovative dynamic transducer design
- Uncovered ear cups for acoustic and stylistic reasons
- Handcrafted ear pads, made of high-quality microfiber fabric
- Metal headband with inner damping element
- Specially tuned symmetrical, impedance matching cable with low capacitance
- Special high precision headphone connectors
- 2 year warranty



### Features HD 800 S

- Further optimized reference class in wired headphones
- Absorber technology
- Additional balanced cable with XLR4 connector
- High-class matt black metal parts



## Safety instructions

- ▶ Read this instruction manual carefully and completely before using the product.
- ▶ Always include this instruction manual when passing the product on to third parties.
- ▶ Do not use an obviously defective product.

### Preventing damage to health and accidents



- ▶ Protect your hearing from high volume levels. Permanent hearing damage may occur when headphones are used at high volume levels for long periods of time. Sennheiser headphones sound exceptionally good at low and medium volume levels.
- ▶ Always maintain a distance of at least 10 cm/3.94" between the headphone cap and cardiac pacemakers or implanted defibrillators (ICDs) since the product generates permanent magnetic fields.
- ▶ Keep the product, accessories and packaging parts out of reach of children and pets to prevent accidents and choking hazards.
- ▶ Do not use the product in situations which require special attention (e.g. in traffic or when performing skilled jobs).

### Preventing damage to the product and malfunctions

- ▶ Always keep the product dry and do not expose it to extreme temperatures (hairdryer, heater, extended exposure to sunlight, etc.) to avoid corrosion or deformation.
- ▶ Do not place your headphones on a glass dummy head, chair armrest or similar objects for long periods as this can widen the headband and reduce the contact pressure of the headphones.
- ▶ Use only attachments/accessories/spare parts supplied or recommended by Sennheiser.
- ▶ Clean the product only with a soft, dry cloth.
- ▶ Use the product with care and store it in a clean, dust-free environment.

### Intended use/Liability

These headphones have been designed for home use with high-quality audio systems.

It is considered improper use when the product is used for any application not named in the corresponding product documentation.

Sennheiser does not accept liability for damage arising from improper use or misuse of this product and its attachments/accessories.

## Package includes



HD 800/HD 800 S



Connection cable with 1/4" (6.3 mm) stereo jack plug



CH 800 S balanced connection cable with XLR-4 connector (HD 800 S only)



Microfiber cloth



USB flash drive (model SD-U16L)

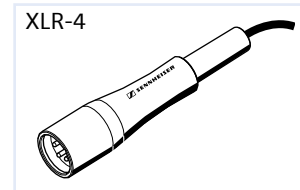
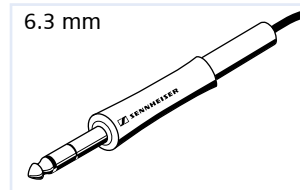


Storage box



Instruction manual

## Your HD 800/HD 800 S

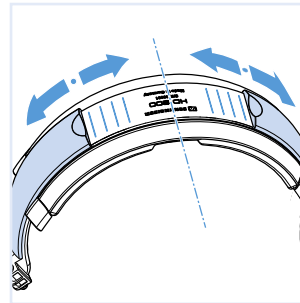
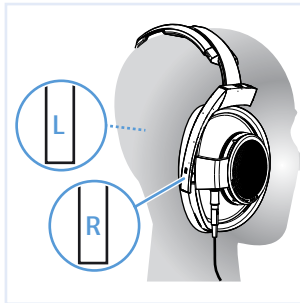


### Connecting the headphones

- ▶ Connect the headphones to a 1/4" (6.3 mm) stereo jack socket or use a standard adapter to connect them to a 3.5 mm stereo jack socket.

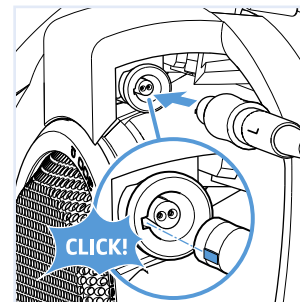
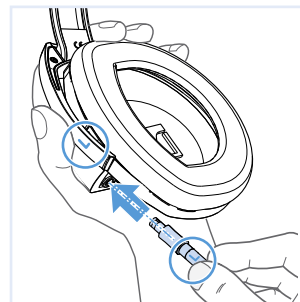
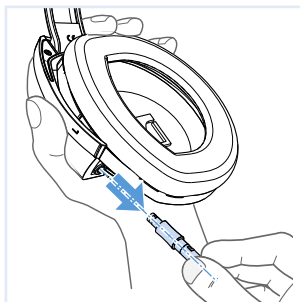
CH 800 S balanced connection cable with XLR-4 connector (supplied with the HD 800 S or available as optional accessory):

- ▶ Change the connection cable as described below.
- ▶ Connect the headphones to a source with a balanced XLR-4 socket, e.g. to the Sennheiser HDVD 800 headphone amplifier.



### Putting on the headphones and using them

- ▶ Put on your headphones and then pull the ear cups down until they rest comfortably over the ears. Make sure you have them the right way round by observing the "R" (right) and "L" (left) markings on the ear cups.
- ▶ Take the headphones off and use the slide scale on the headband to ensure they sit symmetrically.
- ▶ After use, place the headphones into the storage box. Hang the cable up unwound for the first few days after use. After that, you can store the cable wound up loosely.



### Changing the connection cable

To detach the connection cable:

- ▶ Hold the ear cup firmly and pull the connector straight out of the socket by overcoming a slight resistance. Make sure to not damage the metal gauze of the ear cups.

To connect the connection cable:

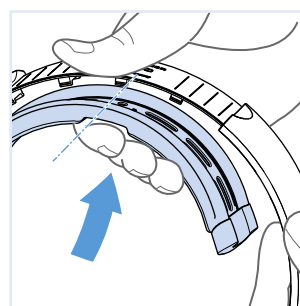
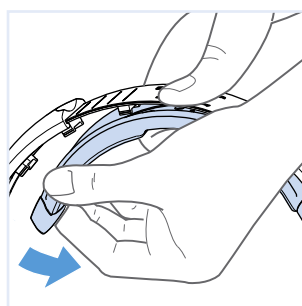
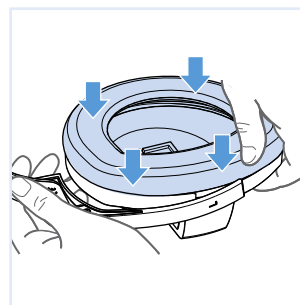
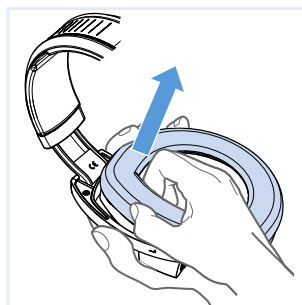
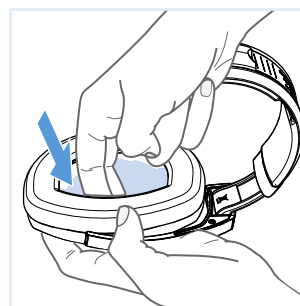
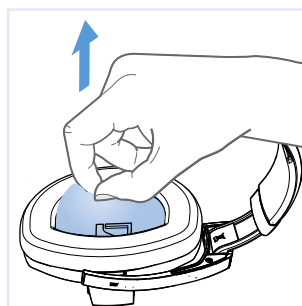
- ▶ Make sure the "R" (right) and "L" (left) markings on the connectors match the markings on the ear cups.
- ▶ Align the latch of the connector with the socket and insert the connector until it snaps into place with an audible click.



## Care and maintenance

For reasons of hygiene, you should replace the ear pads, the inside dust covers and the headband from time to time. Spare parts are available from your Sennheiser partner. To find a Sennheiser partner in your country, search at [www.sennheiser.com](http://www.sennheiser.com).

- ▶ Clean the product only with a dry and soft microfiber cloth (supplied).
- ▶ Store the product in a clean, dust-free place, e.g. in its storage box.



### Cleaning and replacing the dust covers made from 3D Mesh

- ▶ Pull the dust covers away from the ear cups without touching the transducers underneath if possible.
- ▶ Rinse the dust covers under running lukewarm water and let them air dry.
- ▶ Put the dust covers back in place and carefully tuck the edges underneath the ear pads.

### Replacing the ear pads

- ▶ Grasp behind the ear pads and pull them up and away from the ear cups. Make sure to not damage the metal gauze and the transducers on the inside of the ear cups.
- ▶ Place the new ear pads onto the ear cups and attach the ear pads by pressing firmly around them.

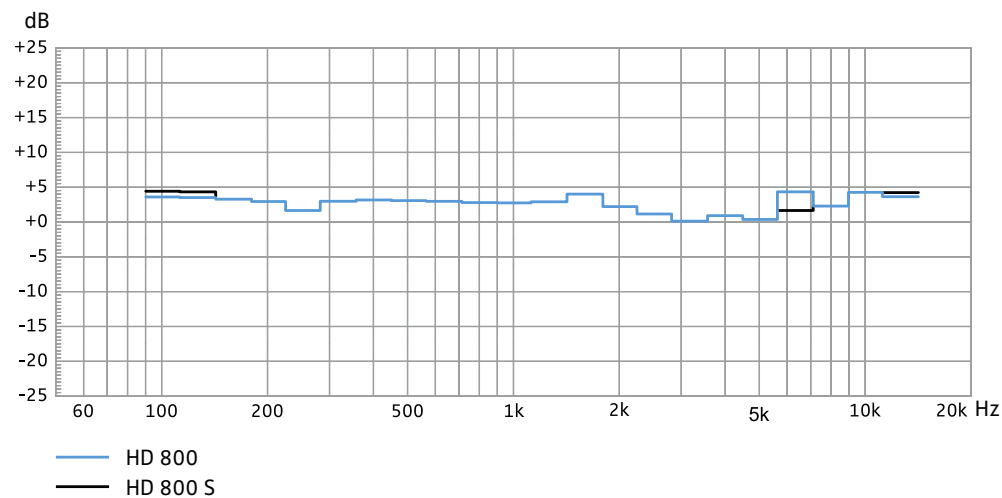
### Replacing the headband

- ▶ Hold the headband firmly in the middle and detach the headband padding from one side to the other.
- ▶ Place the new headband padding onto the headband and attach it to the headband's latches, starting from the middle and moving outwards.

# Specifications

Frequency response	HD 800: 14 - 44,100 Hz (-3 dB) 6 - 51,000 Hz (-10 dB)
Frequency response	HD 800 S: 10 - 44,100 Hz (-3 dB) 4 - 51,000 Hz (-10 dB)
Nominal impedance	diffuse field equalized
Nominal impedance	300 $\Omega$
Sound pressure level at 1 kHz	102 dB (1 $V_{rms}$ )
Long-term input power	max. 500 mW as per EN 60-268-7
THD	$\leq 0.02\%$ (1 kHz, 1 $V_{rms}$ )
Contact pressure	approx. 3.4 N $\pm$ 0.3 N
Ear coupling	circum-aural
Weight	approx. 330 g (without connection cable)
Connector	HD 800: 6.3 mm stereo jack plug HD 800 S: XLR-4 connector or 6.3 mm stereo jack plug, depending on the connection cable used
Connection cable	silver-plated, oxygen-free copper cable (OFC), balanced, shielded, para-aramid reinforced, 3 m
Operating temperature	-10°C to +55°C

## Reference diffuse field frequency response



The individual diffuse field frequency response of your headphones can be found on the enclosed USB flash drive.

# Manufacturer declarations

## Warranty

Sennheiser electronic GmbH & Co. KG gives a warranty of 2 years on this product. For the current warranty conditions, please visit our website at [www.sennheiser.com](http://www.sennheiser.com) or contact your Sennheiser partner.

### FOR AUSTRALIA ONLY

Sennheiser's goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. This warranty is in addition to other rights or remedies under law. Nothing in this warranty excludes, limits or modifies any liability of Sennheiser which is imposed by law, or limits or modifies any remedy available to the consumer which is granted by law. To make a claim under this warranty, contact Sennheiser Australia Pty Ltd, Unit 3, 31 Gibbes Street, Chatswood NSW 2067, Australia; Phone: (02) 9910 6700, email: [service@sennheiser.com.au](mailto:service@sennheiser.com.au).

All expenses of claiming the warranty will be borne by the person making the claim.

The Sennheiser International Warranty is provided by Sennheiser Australia Pty Ltd (ABN 68 165 388 312), Unit 3, 31 Gibbes Street, Chatswood NSW 2067, Australia.

## In compliance with the following requirements



- WEEE Directive (2012/19/EU)  
Please dispose of this product by taking it to your local collection point or recycling center for such equipment. This will help to protect the environment in which we all live.


## CE Declaration of Conformity



- RoHS Directive (2011/65/EU)
- EMC Directive (2014/30/EU)

The declaration is available at [www.sennheiser.com/download](http://www.sennheiser.com/download).

## Statements regarding FCC and Industry Canada

<b>FCC Declaration of Conformity (DoC)</b>	
 <b>SENNHEISER</b> Model No: SD-U16L	
We,	Sennheiser Electronic Corporation One Enterprise Drive • Old Lyme • CT 06371 • USA Tel: +1 (860) 434 9190 Fax: +1 (860) 434 1759
declare the above device comply with the requirements of Federal Communications Commission.	
This device complies with Part 15 of the FCC rules. Operation is subjected to the following two conditions:	
1) This device may not cause harmful interference, and 2) This device must accept any interference received, including interference that may cause undesired operation.	
Responsible Party: Markus Warlitz	

This device complies with Part 15 of the FCC rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This class B digital equipment complies with the Canadian ICES-003.

Changes or modifications made to this equipment not expressly approved by Sennheiser electronic Corp. may void the FCC authorization to operate this equipment.

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







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[www.sennheiser.com](http://www.sennheiser.com)

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