

Sennheiser HD 820

The new benchmark among closed-back headphones

The Sennheiser HD 820 opens up new tonal horizons and takes you into a world full of musicality, passion and emotions – regardless of whether you enjoy your favorite music at home or on the go.

After extensive research and development work, our engineers have succeeded in bringing the best of both worlds together – the HD 820 combines, without compromise, the transparency and naturalness of the best open-back headphones with the sovereignty and serenity of closed-back systems.

The trend-setting design of the HD 820 not only effectively reduces ambient noise, but also ensures an ultra-low bass reproduction and a clear reproduction of mids. This is possible due to the HD 820's patent-pending acoustic diffraction housing – recognizable by the two glass panes behind the transducers.

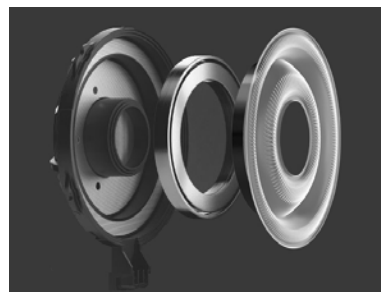
Extremely stiff, convex elements made of Gorilla glass and shaped using a specially developed process specifically direct the sound, which is emanated from the diaphragm towards the rear, into dampened chambers. Therefore, reflected sound waves have virtually no chance of disturbing the movement of the HD 820's advanced 56 mm transducers and of compromising the precision of the audio reproduction.

To ensure perfect sound quality and ultimate wearing comfort, our developers have carefully thought through every detail of the headphones. The crucial parts of the headphones are made from advanced materials – materials that are also used in the aerospace industry for their low weight and high stability.

Due to its double-shell construction, the housing of the Sennheiser HD820 is extremely lightweight and stiff. The headphone yokes guarantee a lasting, comfortable fit and are the result of complex mechanical strength simulations and field tests. The supplied connection cables ensure perfect contact between the headphones and any source device, be it mobile or stationary.

The unique quality of these headphones is guaranteed and backed by our name. Each Sennheiser HD 820 is therefore delivered with a signed chart providing its individually measured frequency response curve and serial number.

Technology-wise, the HD 820 breaks fresh ground and, with its powerful, neutral and transparent sound, sets a new benchmark for closed-back headphones.



Unique: The state-of-the art 56 mm ring radiator transducers are the largest ever used in headphones.



Extraordinary: The Gorilla glass directs sound waves into dampened chambers and drastically reduces distortion.



Perfect: The consistently balanced connections ensure reliable signal transmission to the transducers.

Features of the HD 820

- Closed-back, dynamic reference headphones
- Circum-aural, wired
- Natural listening experience – realistic and natural sound field with minimal resonance
- 56 mm ring radiator transducers – unique, innovative dynamic transducer design
- Closed acoustic diffraction housings with convex glass panes for outstanding acoustics and a visible transducer architecture
- Absorber technology – unwanted rear sound is directed into dampened chambers and eliminated
- Specially tuned balanced, impedance matching cables with low capacitance
- Special high-precision ODU connectors
- Handcrafted ear pads, made of high-quality microfiber fabric
- Metal headband with inner damping element
- Developed in Germany
- Handcrafted in Ireland
- 2-year warranty



Comfortable: The sophisticated headband design guarantees ultimate wearing comfort for long hours of listening.

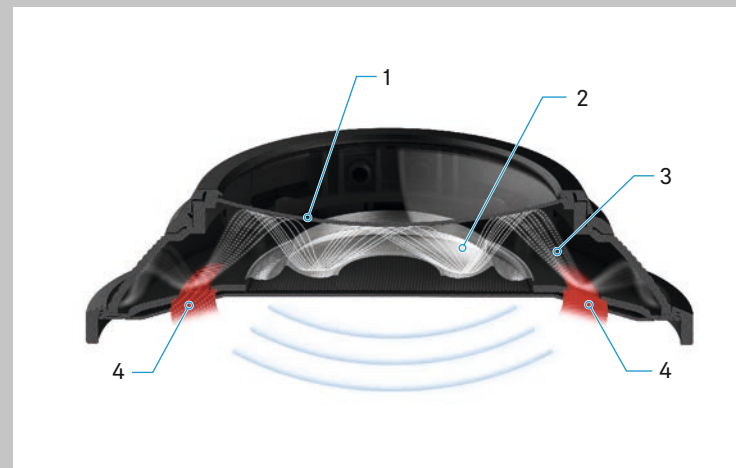


Advanced: Materials developed in the aerospace industry offer minimal weight and maximum stability.



Reliable: The high-precision ODU connectors and balanced connections ensure safe signal transmission.

The acoustic diffraction housing



Besides the advantage of isolating external noise and leakage from inside, closed-back headphones offer excellent reproduction of low tones and bass. Decisive for an as spatial and airy sound reproduction as possible, however, is an optimal damping behavior which ensures that, despite profound basses, the mid-range and high frequencies are not affected negatively.

The HD 820's patent-pending acoustic diffraction housing with its convex glass pane made of Gorilla glass (1) provides an optimal damping behavior. The sound waves (3) produced by the diaphragm (2) are reflected by the hard surfaces of the diffraction housing and directed in a controlled manner into the ring-shaped absorber elements (4) located around the transducers.

The pressure and speed of the sound waves are therefore always controllable and negative side effects are avoided. The result is a clear, interference-free and spatial sound reproduction over the entire frequency spectrum, from about 6 Hz to 48,000 Hz, which is unequalled in closed-back headphones.



Important safety instructions

- ▷ Read this instruction manual carefully and completely before using the product.
- ▷ Always include these safety instructions 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.
- ▷ The product generates stronger permanent magnetic fields that could cause interference with cardiac pacemakers, implanted defibrillators (ICDs) and other implants. Always maintain a distance of at least 3.94"/10 cm between the product component containing the magnet and the cardiac pacemaker, implanted defibrillator, or other implant.
- ▷ Keep the product, accessories and packaging parts out of reach of children and pets to prevent accidents. Swallowing and choking hazard.
- ▷ Do not use the product in an environment that requires your special attention (e.g. when performing skilled jobs).
- ▷ Do not drop the product to prevent the glass panes of the ear cups from shattering. Shattered glass can cause severe injuries.



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.
- ▷ Do not place the storage box on delicate surfaces; if necessary, use a non-slip pad under the storage box. Varnish or furniture polish may degrade the feet of the storage box, which could stain your furniture.
- ▷ Allow the product to stand for at least 2 hours before using it. Condensation can form on the glass panes of the ear cups if the headphones are moved from a cold environment to a warm environment.
- ▷ Use only attachments/accessories/spare parts supplied or recommended by Sonova Consumer Hearing.
- ▷ 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 closed-back, dynamic 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.

Sonova Consumer Hearing GmbH does not accept liability for damage arising from misuse or improper use of the product and its attachments/accessories.

Before putting the product into operation, please observe the respective country-specific regulations.

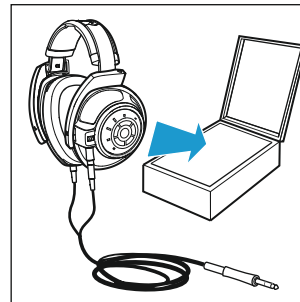
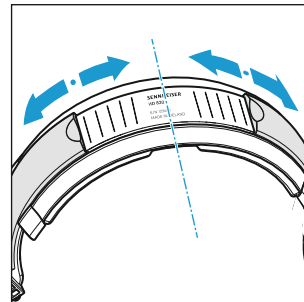
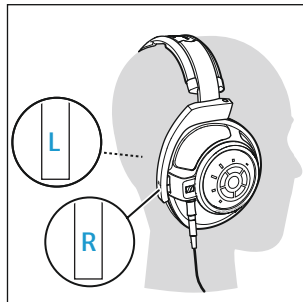
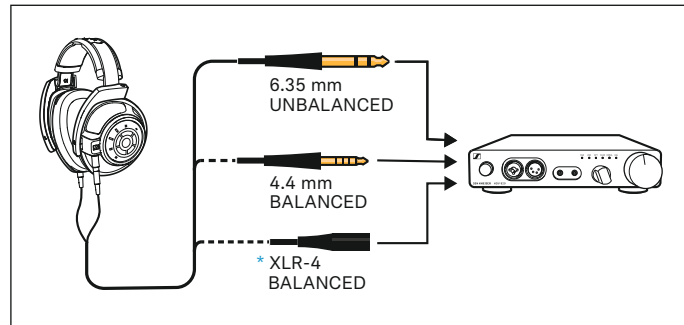
Package contents

- HD 820 closed-back, dynamic headphones
- Connection cable with 1/4" (6.35 mm) stereo jack plug (connected ex works), unbalanced
- Connection cable with 4.4 mm stereo jack plug, balanced
- Instruction manual
- Storage box
- Microfiber cloth

Your HD 820

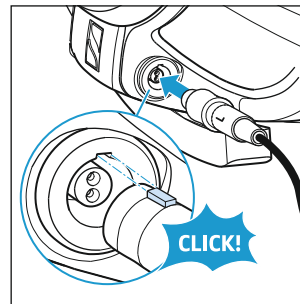
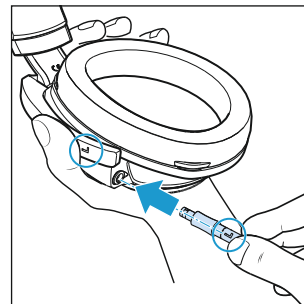
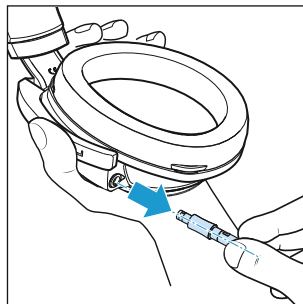
Connecting the headphones

- ▷ Select the suitable connection cable for the audio source to which you want to connect the headphones and change the connection cable as described below:
 - 1/4" (6.35 mm) stereo jack plug, unbalanced (can also be connected to a 3.5 mm stereo jack socket by using a standard adapter)
 - 4.4 mm stereo jack plug, balanced
 - * XLR-4 connector, balanced (Sennheiser CH 800 S, optional accessory)
 - ▷ Connect the headphones to your audio source.
- For optimum music enjoyment, we recommend using a headphone amplifier such as the Sennheiser HDV 820 and a balanced connection cable such as the one equipped with the 4.4 mm stereo jack plug.



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 wear them the right way round by observing the "R" (right) and "L" (left) markings on the ear cup bands.
- ▷ 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.

To attach 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.

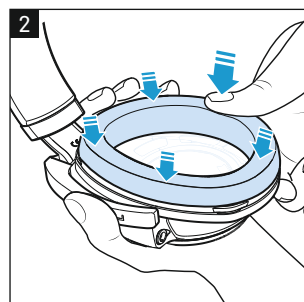
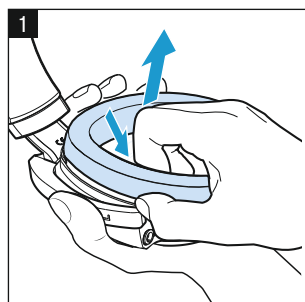
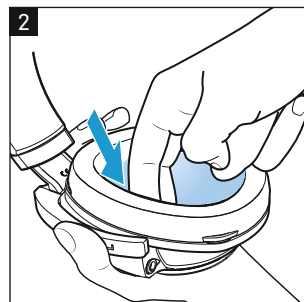
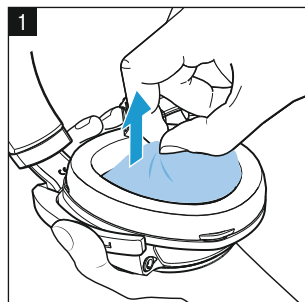
Care and maintenance

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 Sonova Consumer Hearing partner. To find a partner in your country, search at www.sennheiser-hearing.com/service-support.

- ▷ 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.

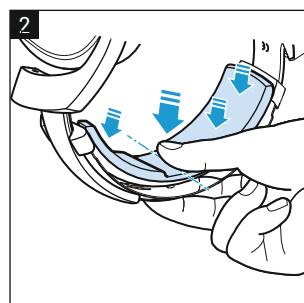
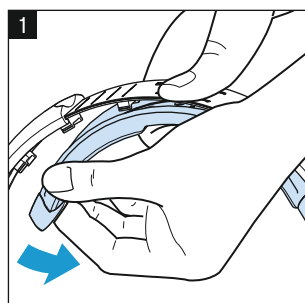
Cleaning and replacing the dust covers made from 3D Mesh

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



Replacing the ear pads

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



Replacing the headband padding

1. Hold the headband firmly in the middle and detach the headband padding from one side to the other.
2. 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	12 – 43,800 Hz (–3 dB) 6 – 48,000 Hz (–10 dB)
Transducer principle	dynamic, closed-back
Ear coupling	circum-aural
Frequency characteristic	diffuse-field equalized
Nominal impedance	300 Ω
Sound pressure level at 1 kHz	103 dB (1 Vrms)
Long-term input power	max. 500 mW as per EN60268-7
THD	≤ 0.02 % (1 kHz, 100 dB SPL)
Contact pressure	approx. 3.8 N ± 0.3 N
Weight	approx. 360 g (without connection cable)
Maximum value of the static magnetic field at the surface	10.5 mT
Attenuation	up to 25 dB
Connector (depending on connection cable, see pin assignment on inside cover page), gold-plated	XLR-4, balanced, 4-pin stereo jack plug: 1/4" (6.35 mm), unbalanced, 3-pin 4.4 mm, balanced, 5-pin
Connection cables	silver-plated, oxygen-free copper cable (OFC), balanced, shielded, para-aramid reinforced, 3 m
Temperature range	operation: –10 °C to +55 °C storage: –20 °C to +70 °C
Relative air humidity (non-condensing)	operation: 10 to 80 %, storage: 10 to 90 %

Manufacturer declarations

Warranty

Sonova Consumer Hearing GmbH gives a warranty of 24 months on this product.

For the current warranty conditions, please visit our website at www.sennheiser-hearing.com/warranty or contact your Sonova Consumer Hearing partner.

For AUSTRALIA and NEW ZEALAND ONLY

Sonova Hearing Australia Pty Ltd provides a warranty of 24 months on these products.

For the current warranty conditions, visit the Sonova Consumer Hearing website: www.sennheiser-hearing.com/warranty.

Sonova Consumer Hearing goods come with guarantees that cannot be excluded under Australian and New Zealand 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 remedy available to the consumer which is granted by law.

To make a claim under this contract, raise a case via the Sonova Consumer Hearing website: www.sennheiser-hearing.com/service-support.

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

Sonova Consumer Hearing international warranty is provided by: Sonova Hearing Australia Pty Ltd (ABN 82651492929) The Zenith, Level 14, Tower A, 821 Pacific Highway, Chatswood New South Wales 2067, Australia.

In compliance with the following requirements

- General Product Safety Regulation (EU) 2023/988
- Compliant to **Sound Pressure Limits** according to country specific requirements.



EU declaration of conformity

- RoHS Directive (2011/65/EU)

The full text of the EU declaration of conformity is available in English language at the following Internet address: www.sennheiser-hearing.com/download.

UK declaration of conformity

- RoHS Regulations (2012)



Notes on disposal

- EU: WEEE Directive (2012/19/EU)
- UK: WEEE Regulations (2013)



The symbol of the crossed-out wheeled bin on the product, the battery/rechargeable battery (if applicable) and/or the packaging indicates that these products must not be disposed of with normal household waste, but must be disposed of separately at the end of their operational lifetime. For packaging disposal, observe the legal regulations on waste segregation applicable in your country. Improper disposal of packaging materials can harm your health and the environment.

The separate collection of waste electrical and electronic equipment, batteries/rechargeable batteries (if applicable) and packaging is used to promote the reuse and recycling and to prevent negative effects on your health and the environment, e.g. caused by potentially hazardous substances contained in these products. Recycle electrical and electronic equipment and batteries/rechargeable batteries at the end of their operational lifetime in order to make contained recyclable materials usable and to avoid littering the environment.

Further information on the recycling of these products can be obtained from your municipal administration, from the municipal collection points, or from your Sonova Consumer Hearing partner. You can also return electrical or electronic equipment to distributors who have a take-back obligation. Herewith you make an important contribution to the protection of the environment and public health.