Sennheiser HD 490 PRO



Sennheiser today launched its brand-new open-back HD 490 PRO reference studio headphones, purpose-built for producing, mixing and mastering. The circumaural, dynamic headphones feature highly precise sound reproduction and a very wide and realistic sound stage. This superior accuracy and range give producers, mixing and mastering engineers, as well as musicians, the transparency they need for

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critical mixing decisions and for confidently resolving any panning placement issues. The HD 490 PRO and HD 490 PRO Plus (includes additional accessories) will be available from the end of January, and can be experienced at the NAMM Show in Anaheim (CA), Sennheiser Group Live Room, #18806.

“If you compare today’s music productions with that of ten, 20 years ago, you will notice how the massively increased computing power and complex parameter automation have changed the way in which music is made,” shares Jimmy Landry, Category Market Manager for MI at Sennheiser. “In every genre, engineers and music creators are continuously pushing boundaries, creating extremely complex mixes that can be prone to so-called ‘audio blind spots’. Mixes can be crowded and muddy, with too many instruments sitting at the same position and their frequencies competing. For the engineer or musician, it becomes difficult to hear each individual instrument or voice distinctly. This goes to show the importance of a good pair of studio headphones.”

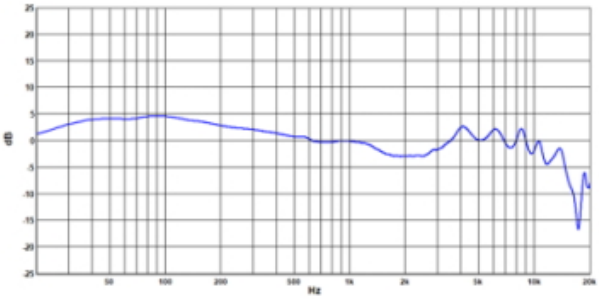
To tackle this complexity, the Sennheiser engineers have given the HD 490 PRO an extremely wide, dimensional sound stage for precisely localising the components of a mix. Ultralight voice coils ensure a fast and authentic sound reproduction. The frequency response is uncoloured and honest across the entire audio spectrum, with the low end being full, accurate, and clearly defined thanks to a special low-frequency cylinder. The open-mesh ear cup covers reveal Sennheiser’s Open-frame Architecture, which minimises resonances and distortion. For an optimal listening experience, the transducers sit at a slight angle, thereby emulating a typical monitor loudspeaker set-up. “All these features combine to enable music professionals to identify and resolve any panning placement issues and troublesome low-end frequencies – ensuring clear mixes and superbly refined masters,” explains Gunnar Dirks, Sennheiser Product Manager. “The HD 490 PRO studio headphones put you in full control of every detail.”

An excellent pair of studio headphones would only be half as good if it were uncomfortable. Therefore, the Sennheiser engineers have put decades of experience from professional headset design into the HD 490 PRO. Their lightweight, ergonomic design eliminates any pressure points, as the headband does not press on the sensitive parts of the head. Also, the circumaural ear pads feature a Sennheiser-patented soft comfort zone for the temples of glasses while maintaining good sealing.

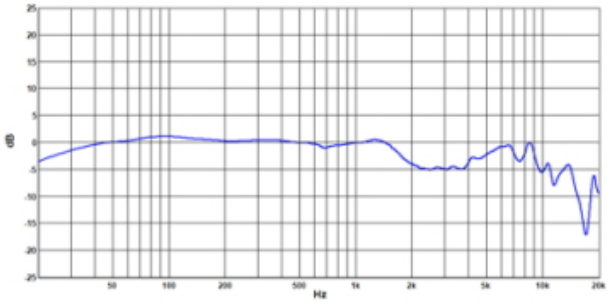
A patent has also been applied for regarding the special axes geometry of the HD 490 PRO. This design makes sure that the headphones optimally adapt to the head when they are put on, and maintain an equal contact pressure no matter what the shape of the user’s head. “When you’re creating music, the last thing you want is to be focusing on the fit of your headphones. The HD 490 PRO let you feel the music and forget about the headphones,” says Landry.

“The development of the HD 490 PRO was preceded by the biggest professional headphone survey we ever did, where users voted neutral and flat reference audio

as the most important feature," explains Dirks. "However, when we took a look at market figures, we discovered that a slightly warmer sound was preferred over a 100% neutral response. Therefore, we decided to give our customers two headphones in one – by providing two different sets of ear pads that were carefully designed to shape the sound differently."



Producing ear pads (velour)



Mixing ear pads (fabric)

The producing ear pads (velour) of the HD 490 PRO have a slightly warmer response to create perspective and help users make a holistic judgement of the sound. The mixing ear pads (fabric), on the other hand, allow for a very flat, neutral sound that helps dive into detail when a sound reference is needed in finishing off a mix. Both ear pads are washable – a solution that is both hygienic and sustainable.

The HD 490 PRO includes a free licence for the innovative dearVR MIX-SE plugin from Dear Reality. The plugin turns a DAW into an ultimate virtual mixing environment, simulating the carefully designed acoustics of ideal mixing studios. Not only is the engineer or musician placed in the sweet spot, dear VR MIX-SE also helps them ensure a balanced and consistent translation of their mixes on different systems.

The meticulous design of this top-of-the-range studio model does not stop with the accessories. For example, the headphone cable can be plugged into the right or left ear piece of the HD 490 PRO to cater to different studio set-ups and preferences. A patented cable coil structure ensures that the headphone cable does not transmit any noise when it hits the desk or rubs against the clothing. The left/right designation is clearly visible on the inside dust covers of the transducers, while for the visually impaired, the headband fork carries braille information.

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Each HD 490 PRO is delivered complete with two different sets of ear pads (mixing and producing) plus a 1.8 m headphone cable and a dearVR MIX-SE licence. It retails at USD 399. The HD 490 PRO Plus, priced at EUR 479, additionally includes a 3 m cable, a transport case, and an extra fabric headband pad in addition to the standard velour headband. All Plus extras are also available as individual accessories. A balanced headphone cable (EUR 39, USD 39) is available as an optional accessory. “If you are looking for studio headphones that give you the transparency and excellent localisation needed for crafting outstanding mixes, the HD 490 PRO are your choice,” says Jimmy Landry.

HD 490 PRO Technical Data

- Acoustic principle: open
- Ear coupling: circumaural
- Transducer principle: dynamic
- Transducer diameter: 38 mm
- Frequency response: 5 – 36,000 Hz, 100 Hz (-10 dB)
- Sensitivity: 105 dB SPL (1 kHz/1 Vrms); 96 dB SPL (1 kHz/1 mW)
- Max. sound pressure level: 128 dB SPL (1 kHz, 5% THD)
- THD: <0.2% (1 kHz, 100 dB SPL)
- Impedance: 130 ohms (1 kHz)
- Power rating: 300 mW (100 h, noise IEC 60268)
- Temperature range: operation: 0° C to +50° C; storage: -25° C to +70° C
- Relative humidity: operation: 10 – 80% (non-condensing); storage: 10 to 90%
- Weight (w/o cable): 260 g

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