

## **ADAM Audio H200**

### **Closed-back headphones with dynamic transducer**

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In October 2024, the loudspeaker specialist ADAM Audio announced the H200, its first pair of headphones, which have now also been available since December 2024. We took a closer look at the acoustically closed headphones with dynamic transducers and, above all, listened to them.

## Concept and technical data



The headphones have circumaural earcups that are acoustically closed. The dynamic driver used has a diameter of 40 mm and an impedance of 32 ohms – so it is relatively low-impedance, like most modern headphones. The sensitivity is 97.5 dB SPL at 1 mW and 1 kHz. The maximum sound pressure is specified by the manufacturer as 112.5 dB SPL (@ 1 kHz, 0.04 % THD). The maximum input power is

30 mW, and the continuous input power is specified by ADAM Audio as 20 mW. The frequency range (-3 dB, 0 dB reference at 1 kHz) is specified as 2 Hz to 23.5 kHz.

Polyetheretherketone is used as the material for the driver's membrane due to its rigidity and thermal properties. This material is also often referred to as PEEK and is a high-performance plastic with a very high melting point. It is also resistant to many influences and guarantees high dimensional stability and durability. As is usually the case with high-quality headphones, neodymium is used as the magnetic material. The driver is protected from external influences by a protective grille covered with fabric and felt.



The weight of the headphones is about 250 grams without the cable, and the housing is made of 85 percent recycled ABS plastic. A 2.5-mm jack socket is provided on both sides of the headphones for connecting the headphone cable. The cable can therefore be plugged in on the left or right (see figure above) and is mechanically locked to prevent accidental unplugging.



The headphones are not foldable. Both ear pads and the headband pad can be replaced. The standard material for the pads is memory foam with an artificial leather cover.

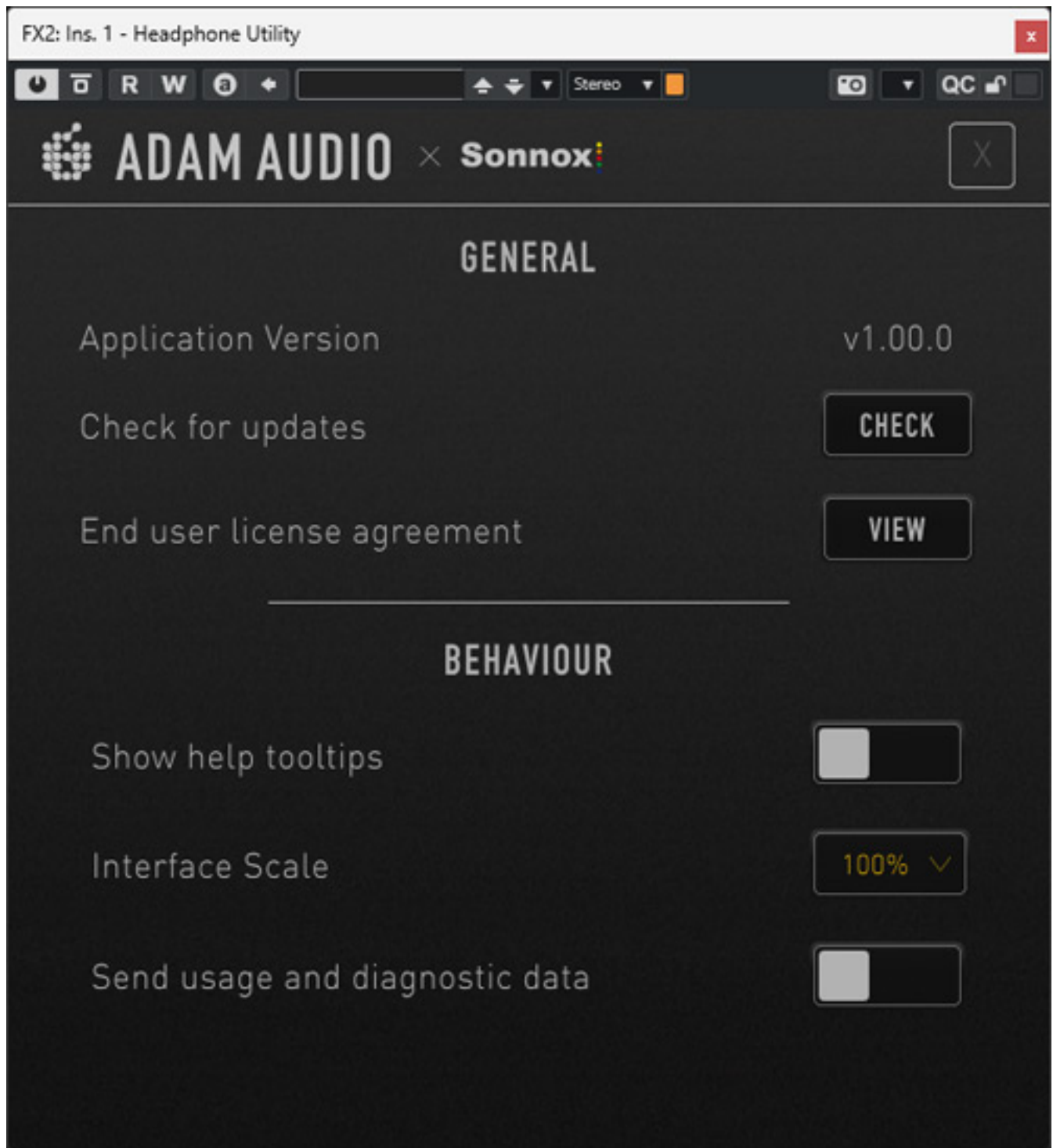
### **Scope of delivery**



In addition to the headphones, the scope of delivery includes a textile bag for protection, a three-meter connection cable with a 3.5-mm jack plug and an adapter from 3.5-mm to 6.3-mm jack plug. Optionally available are replacement pads with a textile cover. More about this later.

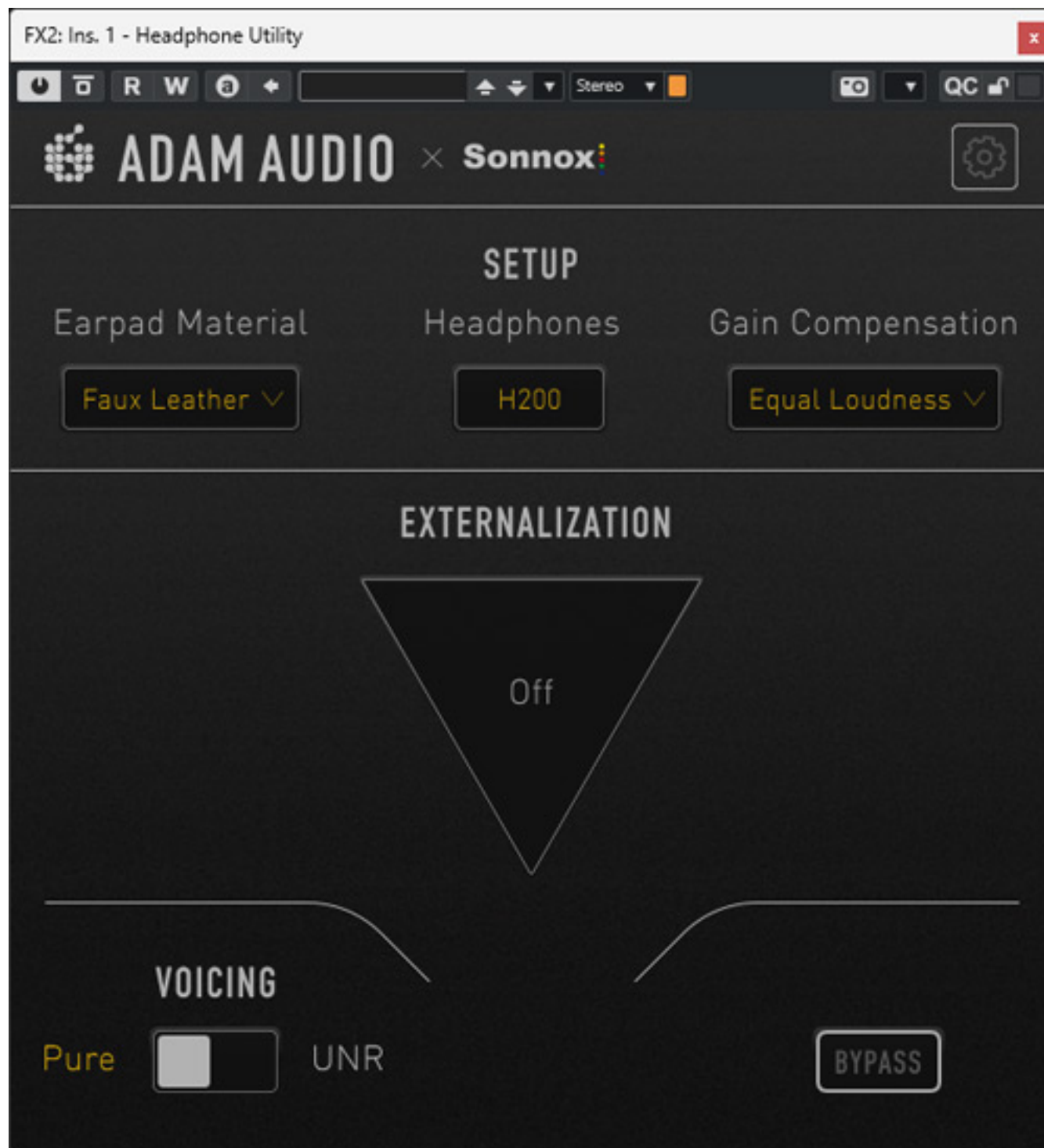
### Plug-In

Like every electroacoustic transducer, headphone converters also have unique sound characteristics. These model-specific properties can be optimized or compensated for using software or plug-ins. For this purpose, ADAM Audio offers its customers the “Headphone Utility” plug-in, developed in collaboration with Sonnox. The plug-in can be downloaded by ADAM Audio users through their MyADAM customer access on the ADAM Audio website after product registration. Registration is done using the serial number found on the product sticker on the box.



The plug-in is available for Windows (Windows 10 or later) and macOS (macOS 13 or later) as a VST3 and AU plug-in (macOS only). Typically, you would integrate it into the master output or the monitor section of the DAW software.

The display size can be set in the plug-in configuration (see figure above) between 75 and 150 percent in 25 percent increments. Furthermore, the user can activate mouse-over tooltips and, among other things, check whether an update is available.



It is relatively easy to operate through selections. A virtual BYPASS button allows the input signal to pass through unprocessed.



We had already mentioned that an optional textile headphone cushion set is available in addition to the standard leather set. The different materials of the ear pad also have an acoustic influence, so you can specify the type of pad used in the plug-in to compensate for this influence using an appropriate equalization curve (see figure above).

The “Gain Compensation” has three settings: Off, Equal Loudness, and Save Mode. What is meant by Gain Compensation is a frequency-dependent level correction. When “Off” is selected, no change is made by the gain compensation, although the earpad material setting is still applied. When “Equal Loudness” is selected, an equalization curve is chosen that ensures an equal loudness perception across the entire frequency range. When “Save Mode” is selected, only level attenuations are used, and a clipper is also used in the signal path to absorb high levels.

Now to the VOICING parameter. This parameter can be used to apply coloration to the sound. The UNR (Uniform Natural Response) setting uses a sound behavior or equalization based on the ADAM Audio AX series speakers, which have a certain sound character that is not present in the newer A series, which has a more neutral sound. When “Pure” is selected, a more neutral equalization is also activated. The switchable EXTERNALIZATION is used to simulate channel crossfeed. The idea behind this is to get closer to a loudspeaker reproduction, as crossfeed also exists between the right and left channels in a loudspeaker reproduction.

### Practice

The H200 is very comfortable to wear, and it sits well and securely on the head. I don't want to say tight here because the headphones don't put excessive pressure on the head, and you can wear them for a long time without any problems. For closed headphones, the H200 offers a very good level of comfort. When worn, it reduces both sound perception from the outside and in the opposite direction, as well as the sound emission from the transducer to the outside, which is important when wearing headphones during recording.



The optional textile pads were not yet available for our test. The material of the earcup pads used clearly has an audible effect. Pads made of textile material are usually a bit more restrained in the lower frequency range, and from a metrological point of view, they offer a more linear frequency response. Based on the compensation effect in the plug-in, this also seems to be the case here, as the fabric pads show a significant increase in the lower frequency range.

Without compensation from the plug-in, the standard pad is therefore likely to be more suitable for producers as well as musicians, while the fabric pad is more suitable for the mixing engineer. Thanks to the plug-in, however, this can of course be adjusted accordingly. The basic sound impression is relatively neutral and balanced. The depiction of the stereo image and the distance are very good. Since the transducers or membranes are relatively close to the ear, there is a higher in-head localization, but this is not necessarily a disadvantage for musicians in the studio when it comes to monitoring. In addition, the H200 handles transients very well and is also very good at reproducing individual instruments.

Incidentally, the plug-in in the "UNR" position reproduces the sound characteristics of the AX series very well. For mixing, I personally find the voicing setting "Pure" more suitable, and for listening to music, you can switch to the "UNR" setting. Here, you have more pressure, and more over, more punch in the bass. The difference between Pure and UNR is also significantly greater than that between the two ear pad types. The so-called EXTERNALIZATION significantly changes the stereo image through targeted channel crosstalk. The effect is also offered by many headphone amplifiers and is called Crossfeed or X-Feed. Personally, I don't like it that much because the stereo image is massively affected. But you don't have to use it. It's just an option for those who don't want to do without it, and the used headphone amplifier used doesn't offer this option.

### Conclusion

The price of the ADAM Audio H200 is around 160 euros. To sum up, the H200 offers a good level of comfort for closed, circumaural headphones, provides very good acoustic decoupling from the environment, offers a rather linear and balanced sound, and thanks to the plug-in, can be flexibly adapted to the respective application. Headphones, whether acoustically closed or open, are never all-arounders. The H200 covers the application profile for closed headphones very well. Especially in terms of price, it offers exactly the typical features you need.

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