

Bowers & Wilkins

P5 Wireless Technology





## P5 Wireless

As P5 Wireless has a different internal design to accommodate the electronics and battery, the acoustic system was retuned to ensure P5 Wireless performed as well as P5 Series 2.

It was also vital the product sounded the same when used wirelessly or with a cable. To achieve this P5 Wireless was tuned passively, using mechanical and acoustic techniques, with no additional equalisation from the electronics when in wireless mode.

Retuning the acoustic damping foam and careful selection of the resistive mesh on the speaker chassis has compensated for the loss in acoustic volume. Because of the volume occupied by the electronics and battery, the internal volume and structure of the left and right sides have been designed to be identical. This helps to achieve an identical frequency response between sides.

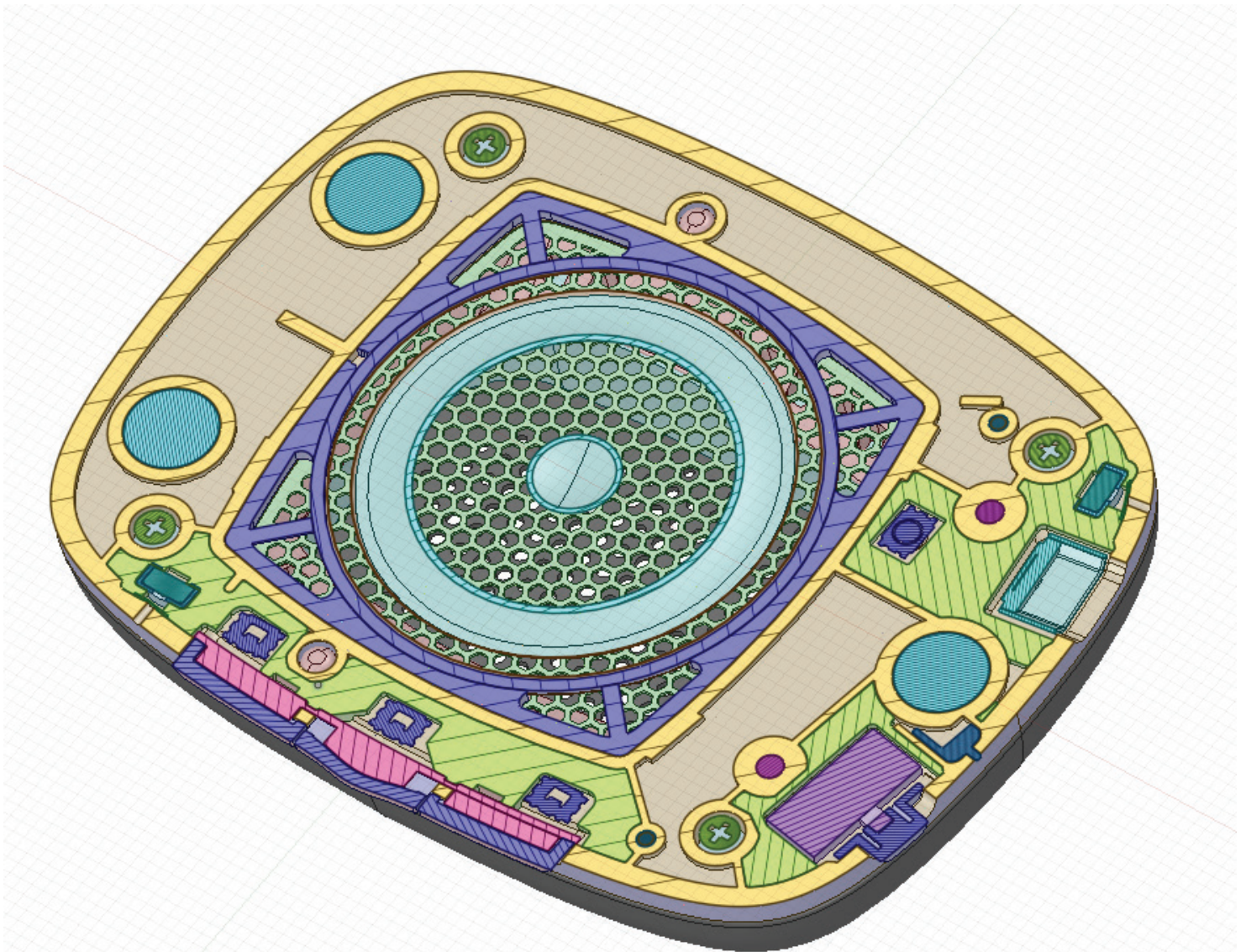


## Drivers

With most headphones, sound quality is a direct result of the way the drive units are designed, and the diaphragm usually performs the dual role of sound generator and suspension system.

For P5 Wireless our engineering expertise has allowed us to adopt the P7 driver techniques, for a new kind of headphone driver that works more like the drive unit in a Hi-Fi speaker, with a diaphragm focused purely on the job it's supposed to do: generate sound. Which means a drive unit with a more precise, controlled movement – and a giant leap forward in sound quality.

Like, P5 Series 2, P5 Wireless also uses a patented new chassis design with integral short circuit.





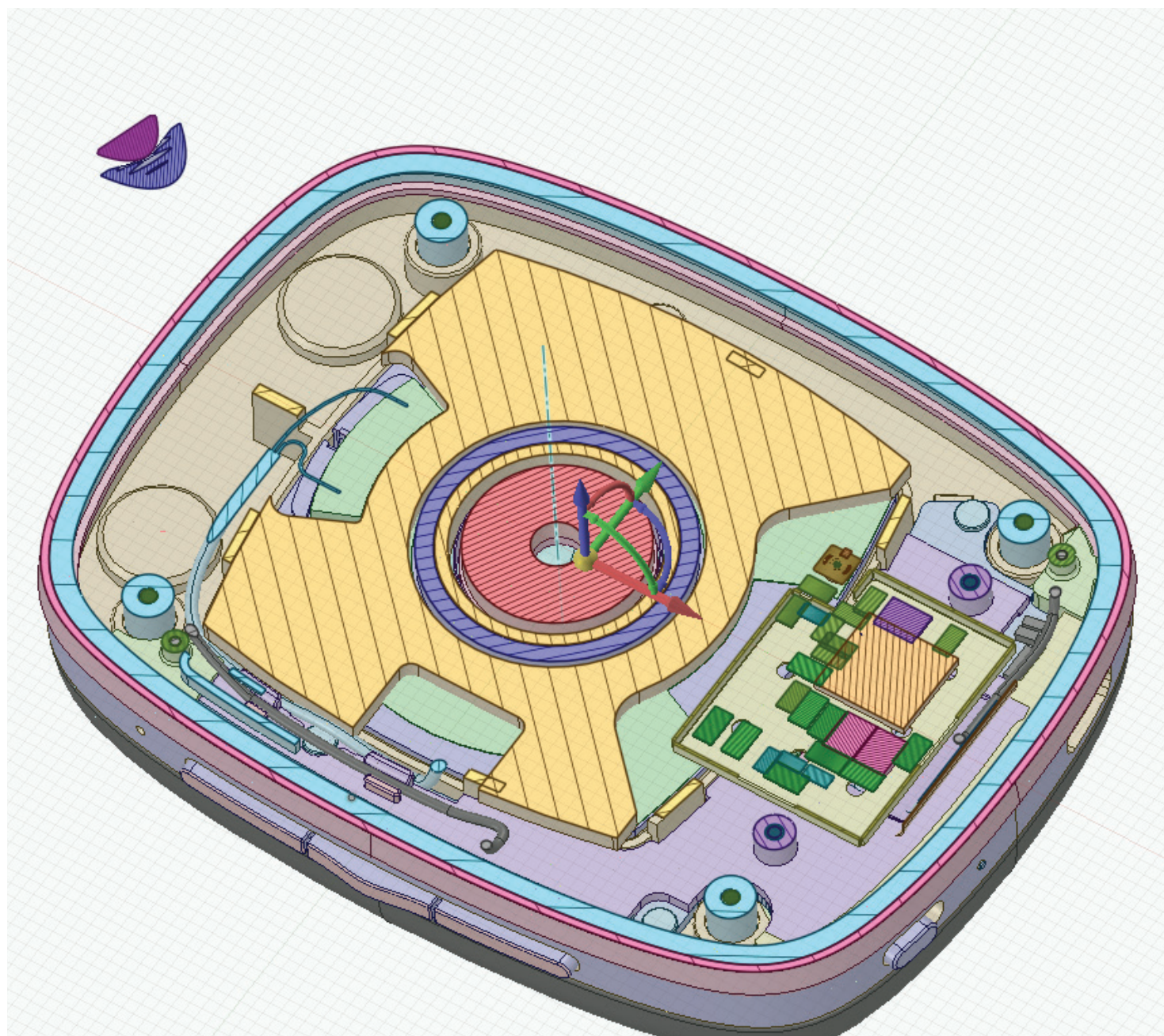
# Electronics

Most Bluetooth headphones use an amplifier that is part of the Bluetooth® electronics module. P5 Wireless uses a separate amplifier section selected and tuned to ensure an open natural sound.

The digital signal processor has been developed to produce a linear listening experience independent of source device or volume level.

P5 Wireless supports aptX® audio coding technology for high-resolution Bluetooth streaming.

Optimising the electronics and battery solution has allowed for P5 Wireless to achieve 17 hours at normal listening levels.



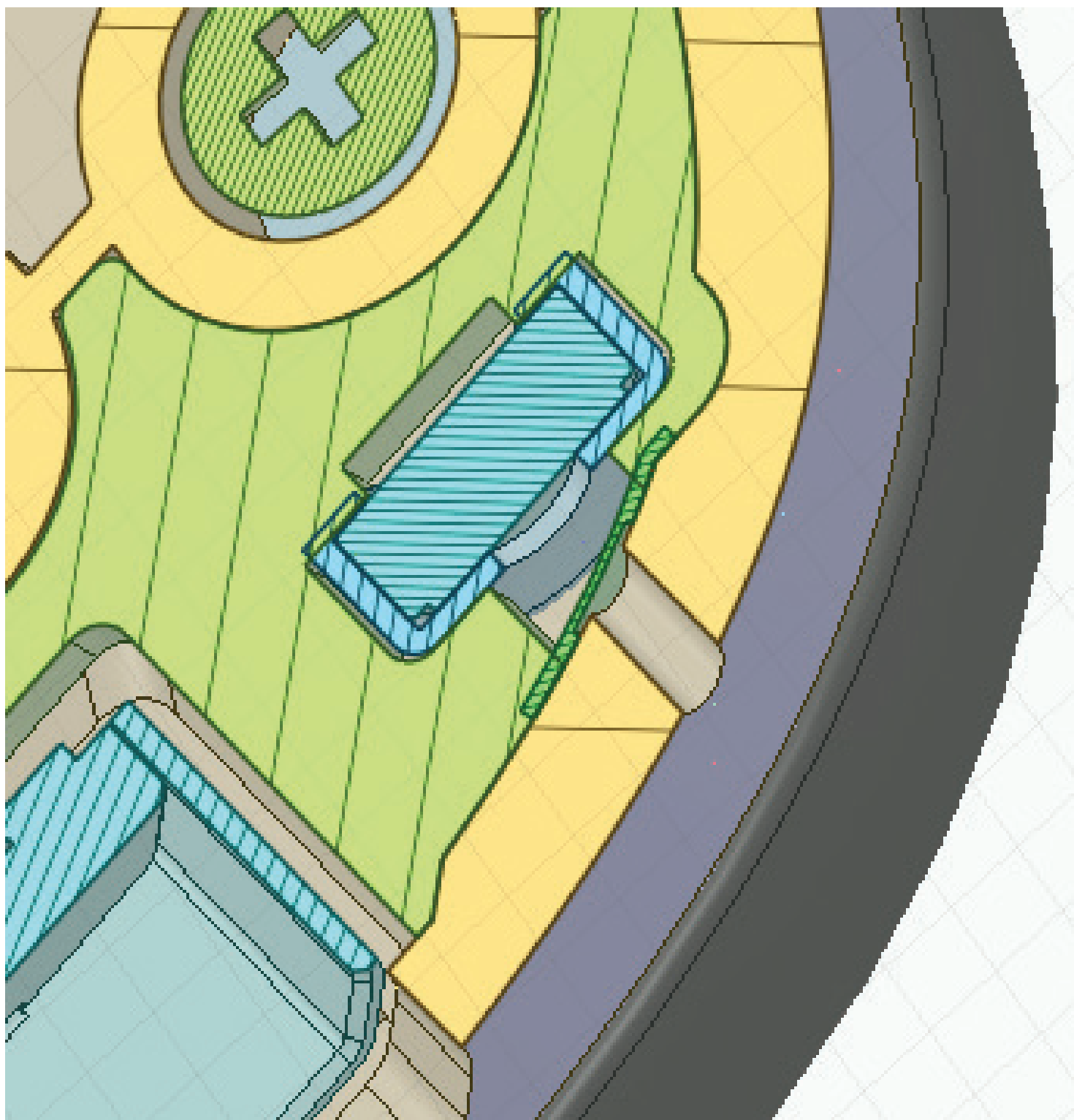


# Microphones

In addition to the listening experience we have also worked hard to ensure the best telephony performance.

P5 Wireless uses two microphones and Clear Voice Capture technology (CVC 2) algorithms. This improves performance compared to a single microphone. One microphone focuses on the voice that is to be heard, while the additional microphone monitors the environmental noise. This allows the microphone to focus and reproduce the voice to be heard while reducing background noise.

The parts that house the microphone have been designed in a way that reduces wind noise.





## Ergonomics

Due to the slightly different size and weight of P5 Wireless compared to P5 Series 2, the ergonomics have been extensively tested and refined to ensure a comfortable and enjoyable listening experience.

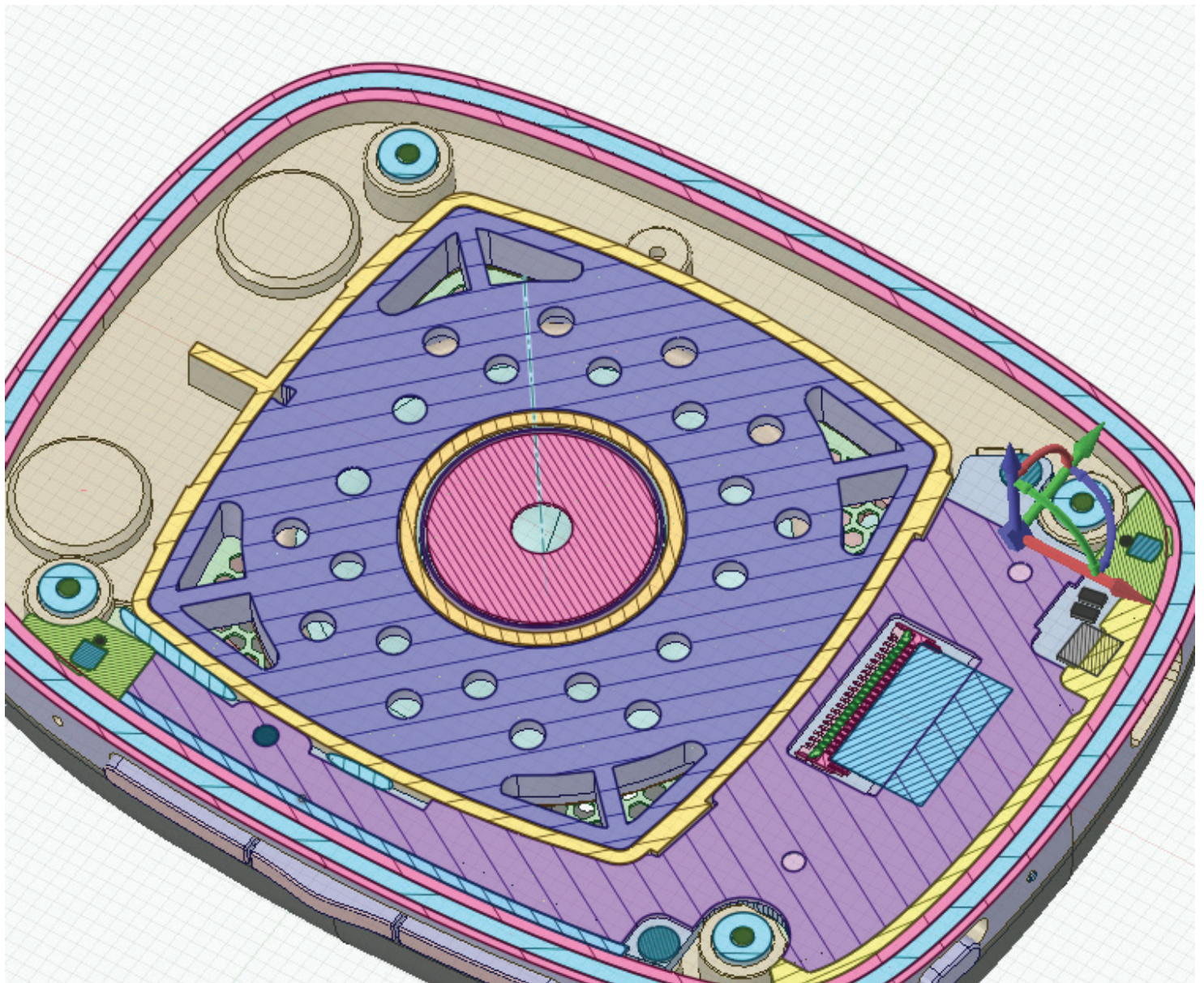




## Speaker plate

The speaker plate component has been carefully designed to include acoustic short circuits. This venting is optimised to enhance bass performance and add openness to the sound.

Additionally, the location of the speaker within the plate has been adjusted to ensure optimum position against the ear.





## Ear cushions

P5 Wireless uses innovative ear cushions, where the memory foam has been engineered to provide additional damping and extra comfort.

The support structure includes small vents optimised to reduce coloration.

