



SYSTEMS & SOLUTIONS

NOISE-CANCELLING HEADPHONES

KEF/PORSCHE DESIGN SPACE ONE



It is unheard of us to wear a pair of review headphones daily for a month and not write a word about them. Yet that's what happened with the Space One. Every commute, a couple of short flights — we normally note down tracks that show up particular characteristics of the sound. But really, what characteristics do you want? A pushy bass? An overladen midrange? Peakiness on high-mids? No, none of those. You want nothing extra at all — just the music thanks. And that's why we didn't write anything about the Space One. They weren't doing anything wrong.

EQUIPMENT

The Space Ones are over-ear wired headphones, with a button on the left shell to turn on active noise-cancellation, magically removing background rumble (plane, bus and train noise) by inverting sound captured by microphones on the headshells. ANC is a traveller's friend; fly longhaul with ANC once and you'll never fly again without it. Business travel is a key market serviced by Porsche Design with its own catalogue of products, and when the company decided to create a 'Sound' category, noise-cancellers were top of the list.

So with the Porsche Design name on the Space Ones, there's a danger of thinking that the 'design' is adding style rather than substance, superficially Porsching up the exterior for the sake

of brand cachet. But that's not it at all. When CEO Dr Jan Becker talks about the Book One, or Chief Design Officer Roland Heiler talks about the 'Sound' portfolio, of which the Space One is part (see our interview overleaf), they're not talking about mere aesthetics, but rather complete product design — all the performance, but nice-looking too, indeed function feeding form feeding performance. There's nothing blingy about the Space Ones — nobody stared at our head on the bus commute. But classy yes, with black cups and headband, and cast aluminium for the body with a sandblasted titanium finish.

When we first saw pictures of them, we were struck by the resemblance to KEF's previous M500 and M400 headphones, and were surprised that Porsche Design hadn't indulged in greater differentiation. But we had forgotten that KEF had worked with Porsche Design on those M500s too (pictured right), and on the subsequent M400s. Those were, remarkably, KEF's first ever

headphones, and we get the impression that back then it was KEF consulting F.A. Studio Porsche for its visual flair, while now we see Porsche Design using that connection to get KEF involved with sound for its own line of products. And the result seems a pleasingly even-handed collaboration — symbolised by the detachable cable for the Space Ones, which has a KEF logo on the plug at one end, a Porsche Design symbol on the other end, with no direction of insertion indicated. Nice.

BELOW: KEF's original M500 received a Sound+Image Highly Commended award for its combination of solid sonics and neat design — which had input from Studio F.A. Porsche.





THE 'SOUND' PORTFOLIO: KEF and Porsche Design Group's Motion One Earphones (\$399) and the Gravity One Bluetooth speaker (\$499).

PERFORMANCE

The Space Ones are comfortable, and fit firmly but not excessively against the head. Indeed such is the excellent seal thus created, there is a high level of passive noise reduction even without ANC, and passive proved our preferred listening mode, as we'll see.

But first, the battery insertion. This involves pressing a release catch invisibly hidden within the folds of the earcup, its position indicated only by a pictogram in the instructions. We could not find it, or work it. We pushed so hard we thought our fingers might go through the diaphragm; we can only assume a sticky

issue with our review pair. Eventually we took the headphones to someone who already owned a pair, and after a few attempts, he punched through and the outer headshell



popped open. We replaced the batteries. We were keen to replace them because we weren't fond of the tonal effect we were hearing when activating the noise cancelling, but this proved inherent rather than a battery issue. While the cancelling was certainly effective, it added a boxiness to the music and softened the sound's delightful edge, which plays so well to their imaging abilities. It's not wildly severe; it was more the clear difference when switching from one to the other — and it will matter not at all when you have them plugged into an inflight entertainment system for a movie. But for music or even spoken word, we much preferred just the passive isolation with the headphones' natural sound.

Because that was so extremely enjoyable. Everything in its place. As mentioned at the start, they did nothing wrong. The bass, for example, is realistic rather than pushed — the full underpinning on the Barenaked Ladies' *Leave* was presented with real thrum and firmness but no bloat, even when pumping over the rumble of the morning commute. Similar richness was given the stringed bass on the Blue Chamber Ensemble's wonderful version of Chick Corea's *Children's Song No 16* (a Stockfisch recording), while the taps of percussion were crisply edged and the arrangement delivered with all its layers of complexity and rhythm.

Female vocals were a midrange thrill, whether the aspirated maturity of Joni Mitchell on the re-recording of *Both Sides Now*, or kd lang's complex stacked chorus harmonies on *The Air That I Breathe*, while Leonard Cohen retained both his rasp and his deep bass content in a single vocal image on *Going Home*. And these are not highlighted performances of tunes that the headphones 'liked' — the Space Ones seemed to like everything. Rock rocked, jazz jazzed, classical got a full head of dynamics and a wide spread of well-toned orchestra. And spoken word was spot on — tonally accurate to the original miking.

Why no Bluetooth? In nearly all cases, Bluetooth transmission reduces quality and also limits available volume — and with the quality-first attitude of both companies here, that's probably enough to explain the omission.

There's no control lanyard on the cable here, but we rarely missed it, and while the earcups pivot flat for storage, their yokes don't fold in for really compact storage, so the supplied hard carrycase will come in handy.

CONCLUSION

Try the ANC for yourself — it will be great for aircraft use in particular. But for day to day, you may find you don't need it, which also saves on batteries too (though the quoted 50 hours with ANC engaged is very impressive). Meanwhile be assured that the Porsche Design input here is not merely skin deep; this even-handed collaboration with KEF's voicing skills has delivered a great-sounding headphone that exudes competence and confidence across a full range of music. ■

KEF Porsche Design Space One ANC headphones

- Excellent passive sound across all music types
- Comfortable and firm
- Design and brand cachet

- Tonal changes with ANC engaged

Price: \$599
Type: Circumaural closed-back with ANC
Driver: 40mm
Impedance: 32 ohms
Quoted frequency response: 20-20kHz
Sensitivity: 89dB ±3dB (ANC off), 93dB ±3dB (ANC ON)
Quoted battery life: up to 50 hours
Contact: Advance Audio Australia
Telephone: 02 9561 0799
Website: www.advanceaudio.com.au



An Interview With Roland Heiler

Chief Design Officer,
Porsche Design Group

At the recent IFA Global Press Conference 2017, we enjoyed a presentation from the Porsche Design Group's CEO, Dr Jan Becker, on the company's Book One, a stylish reinterpretation of the 2-in-1 tablet-computer (pictured right). But with our audio focus, we were delighted to be able to interview Roland Heiler, the Group's Chief Design Officer, who was able to answer our questions on the 'Sound' portfolio and how it was developed with KEF.

Roland Heiler, Porsche Design Group's Chief Design Officer.

SOUND+IMAGE: *Did you already have 'sound' on the Porsche Design roadmap before the work with KEF came about, and how did the companies make contact?*

ROLAND HEILER: This cooperation with KEF is the first one for sound products under the Porsche Design brand. It is a result of our strategy to deliver Active Noise Cancelling headphones along with Bluetooth headphones and speakers. These items are essential to today's style-savvy business travellers. In order to achieve a sound quality that matches our design standards, we partnered with KEF, a company with its own long-standing heritage and reputation for high-fidelity sound and refined aesthetics.

However, the first touch-point with KEF was a cooperation between Studio F.A. Porsche and KEF for the first generation of KEF headphones. Inspired by the success of the M-Series, Porsche Design and KEF decided to enter in a license partnership in order to bring high-end Porsche Design/KEF sound products to the market.

S+I: *How were the three product types settled upon, and what were the overall priorities for the 'sound' range?*

RH: In close alignment with KEF we identified in-ear and over-ear headphones as a must in this segment. A portable compact and powerful soundbar was the perfect and logical extension to the two headphone sets. GRAVITY ONE, MOTION ONE and SPACE ONE were to offer a new level of design and audio performance to the most demanding consumers.

S+I: *Can you tell us about any challenges that were overcome, or design solutions of which the team was particularly proud on these three products?*

RH: For SPACE ONE the biggest challenge was to integrate the noise cancellation components including batteries, circuit board etc., while preserving a somewhat compact and sleek

The Book One, detachable tablet-computer with its 'gearbox-inspired' hinge.



appearance, since the product was clearly positioned as a travel headphone.

For MOTION ONE, our target was to create an utmost slim neckband, appearing rather like a slightly thicker cable instead of a bulky housing. The earpieces have a rotating earbud to enable the cable to be worn over the ear for greater stability, the cable is detachable by a micro-jack and the earpieces are joining together by magnets, to reduce the chance of cable tangles. To integrate all these features into a preferably small housing was the challenge here.

For GRAVITY ONE the challenge was to differentiate the product from the large number of competitive products on the market, many of them very ambitious, iconic and design-orientated already. Our typical standalone feature, design and functionwise, is the 'overhanging wings' functional design, which gives space for the downfiring bass speakers, in combination with the upfiring main speakers. This allows for multidirectional sound emission. In addition this architecture allowed us to hide all the connectors.

S+I: *With audio, the form itself can directly affect acoustics, so was there more to-and-fro between Studio F.A. Porsche and KEF than might be the case in other fields? Did the form follow established function?*

RH: Working very closely with the engineering departments of partners is part of Studio F. A. Porsche's philosophy, because functionality plays a key role in our understanding of good design attitude. Especially for the GRAVITY ONE the form was directly determined by KEF's request for an upfiring main speaker, due to acoustic reasons. As mentioned above, the opposite downfiring bass even more determines the unique design character. As we are well recognised by the use of materials like aluminium we decided that the speaker should be crafted from a single piece of aluminium. The black accents underline our distinctive design language.

S+I: *Many Porsche Design designs are timeless — but technology can put a clock on shelf-life, say for your smartphone or the Book One shown at the IFA GPC, and to some extent with audio products. How does this impact on the designs and bringing them to market?*

RH: Our target is always to propose designs with a focus on functionality, exceptional and high quality materials, that have a long lifecycle. However, as you mention, consumer electronics do have specific rules in this respect. But we don't really change our approach to design. The timelessness of our products is typically a result of a very minimalistic design language and therefore even products with a shorter life feature this same look.

S+I: *Is the 'sound' range ripe for further development? Any secrets you can share?*

RH: Yes, new products are in the pipeline. As in the past, we like to surprise but we will of course let you know in due time what's next in this exciting product category. *Interview: Jez Ford*