Low-output moving-coil cartridge
Made by: Excel Sound Co., Ltd, Yokohama, Japan
Supplied by: Air Audio Services Ltd,
Telephone: 01491 629 629
Web: www.excelsound.jp; www.airaudio.co.uk
Price: £7995

AUDIO FILE

hi-fi news OUTSTANDING PRODUCT

Hana Umami Black

Japanese cartridge artisan, Excel Sound, has launched a new flagship moving-coil fitted with a gold-plated rare-earth magnet, 4N copper coils and a diamond cantilever
Review: **Adam Smith** Lab: **Paul Miller**

For a brand that's a relatively new name to the hi-fi industry, Hana is already making big waves in the vinyl community. With four distinct cartridge ranges (moving-coil only) comprising the E, S and M models in both high- and low-output versions and topping out in the Umami series, it previously had options covering a price range of £419 to £3399. However, that selection has now been crowned by a no-compromise flagship, the £7995 Umami Black.

Of course, only the Hana name itself is relatively new, having been introduced in 2016. The power behind the brand is the Excel Sound Corporation of Japan, a dedicated outfit that's been making cartridges both under its own name and as an OEM manufacturer since the 1970s. The company confidently describes the new Umami Black as chief designer Masao Okada-san's 'masterpiece'.

The first Umami model was the £3399 Red [*HFN* Dec '20] and this was followed by the more affordable £2149 Blue in 2023. The Black aims to build on the tradition of the company's 'brilliant and gorgeous' sound, taking the sonic performance to a new level, thanks to several key innovations that are unique to the model. Most notable is the cantilever material.

'The alluring "Lover Girl" sent a tingle down my spine'

LEFT: The Umami Black is packaged in a simple but very sturdy wood box with a one-piece plastic stylus guard covering the entire body

A GEM OF AN IDEA

While the stylus tip and cantilever are not a single piece design, like that used in the DS Audio Grand Master Extreme [*HFN* Oct '23], or even Sony's XL-88D from 1980, the Umami Black still makes use of a solid diamond cantilever. The stylus is bonded into a laser-cut hole using minimal adhesive [see PM's boxout, p63]. Amusingly, this does leave a diamond 'shank' visible above the cantilever – the last time I saw a stylus that looked like this, it had a Sonotone badge and you could flip it over to play 78s! The business end of the stylus sports a 'Microline' nude diamond, with a 0.2mm^2 profile, that is shared with both the Umami Red and Blue models.

The diamond cantilever is fitted into a hollow mounting rod affixed to the main armature, the latter fashioned into a 2mm^2 hybrid carbon permalloy square consisting of 78% carbon-infused nickel-iron. By comparison, the Umami Red and Blue MCs use simpler armatures made from an unadulterated permalloy.

The main generator has also been reworked for the Umami Black. Christened 'OKD' by Hana, it features an integrated pole-piece and rear yoke that works in conjunction with a new U-shaped front yoke [see inset pic, p63]. Hana claims this open-ended front yoke helps maintain a more uniform magnetic flux around the coils, reducing saturation in the magnetic circuit. Once again, this configuration is unique to the Black.

ABOVE: The Umami Black's 'OKD' generator has 4N copper coils wound onto a 2mm^2 permalloy plate/armature, seen here between the front and rear rare-earth magnet yokes

The overall generator set-up was designed to have a compact and rigid structure, with the intention of minimising magnetic power loss and suppressing unwanted mechanical vibrations. All metal parts in the Black's OKD generator, including the pins, are cryogenically treated. Hana reasons that this results in enhanced conductivity, reduced distortion and 'remarkable tonal purity'.

LOW OUTPUT

The Black's coils consist of 30 turns of hand-wound 4N-purity copper wire, promising a 0.3mV output from a 5ohm source impedance [see PM's Lab Report, p65]. Hana recommends a load impedance of at least 50ohm and this, with the medium/low output, suggests the Umami Black will be compatible with most standard MC phono stages. That said, its low generator impedance might tempt ⇨

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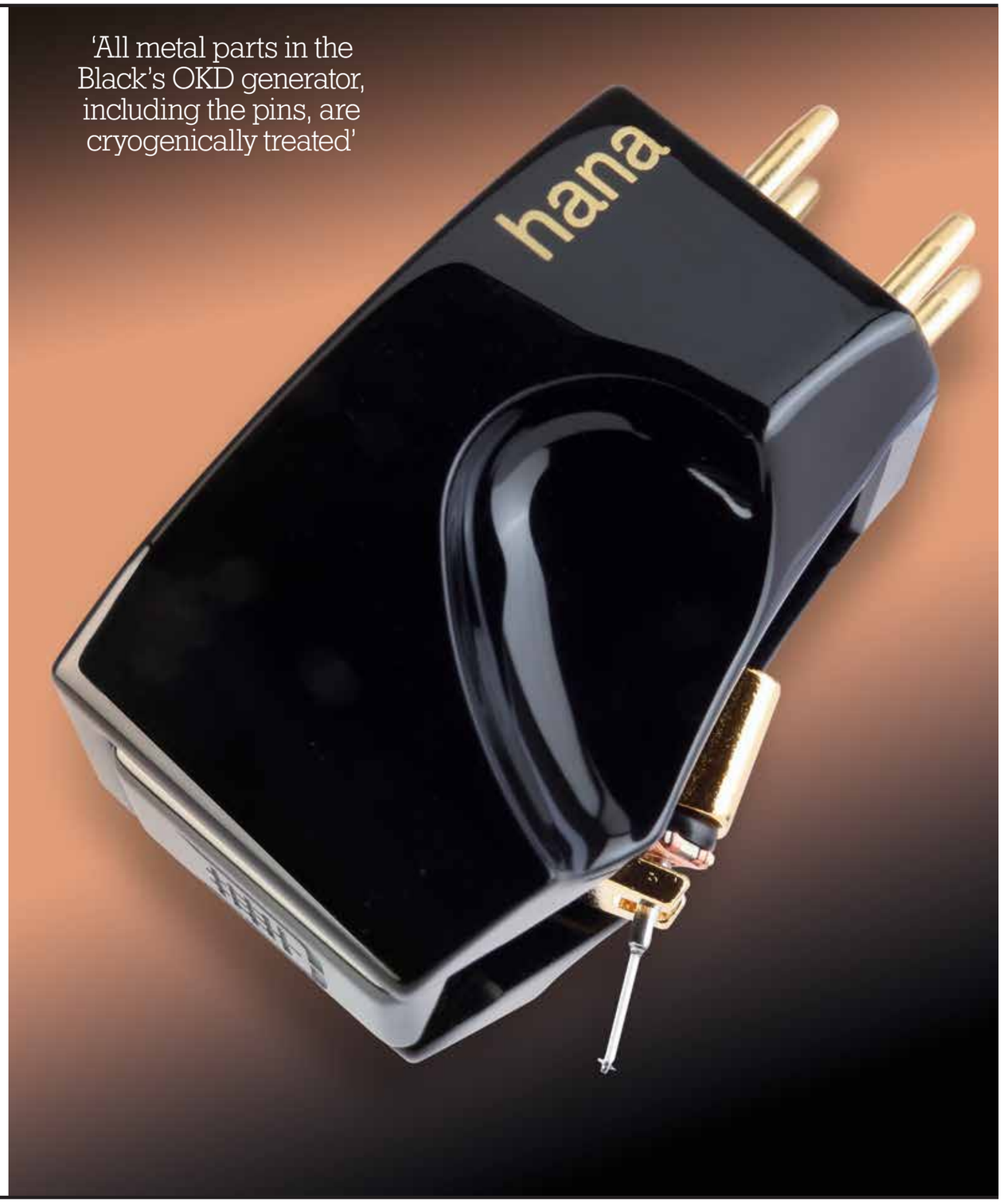

some enthusiasts to try a transimpedance, current-input MC preamp, such as that featured on the MoFi Electronics MasterPhono [*HFN* Dec '23].

The Umami Black's body is fashioned in the familiar 'Auricle' shape of its Red and Blue siblings, which is based on the profile of the human ear, and is machined from A7075 aircraft-grade aluminium. The body is coated in an exquisite gloss black Urushi lacquer, while the front features a black zirconia inlay for 'added damping and visual elegance'.

ABOVE: The 'Auricle' body is fashioned from an Urushi lacquer-coated duralumin, with black zirconia inlay, and includes two M2.6 threaded inserts for locking tight into a headshell

BOLTS 'N' BRUSH

Tapped M2.6 holes in the cartridge body make fitment easy, but note the holes are blind and not especially deep. Fortunately, the Umami Black comes supplied with Allen bolts of 4, 5, 6 and 8mm in length, which will cover most headshells. An elegant wooden-handled stylus brush is also included, plus a stylus guard that covers the entire cartridge body.

Thanks to the tapped holes and chunky body, installation of the Umami Black is straightforward. Hana recommends a tracking weight of 2g, with no suggested tolerance range. When I installed the cartridge in an SME Series V arm, on my regular Michell Gyro SE turntable, I stayed at 2g throughout auditioning as increasing or lowering this brought no appreciable improvement. Another observation is that the cartridge sounded best loaded at 100ohm – the 'rule of ten' value of 50ohm robbed it of some sparkle and flattened the depth perspective. Setting it any higher introduced a slight midrange stridency.

BLACK MAGIC

It's not unusual for a piece of hi-fi to sound like you think it *should*, based on its appearance or specification. A substantial, heavyweight turntable feels like it ought to offer a solid, weighty sound, and the sight of large loudspeakers makes one imagine a voluminous soundstage. On this basis, the clear, open and dynamic performance of Hana's Umami Black seems to deliver on the promise of its diamond cantilever.

While the cartridge took a few LP sides to really 'wake up', once it did, there was no stopping it. The Umami Black's sound was detailed, forthright and ebullient, missing absolutely nothing within the mix of any type of music. On occasion during listening sessions I had to repeat a few tracks, as I was too busy enjoying the performance to remember to write down any notes.

Hana's new flagship draws you into the heart of the music by uncovering every nuance in a recording, yet makes sure all aspects knit together as a captivating whole. I don't think I've heard drummer Dave Grohl's cymbals on Nirvana's low-tempo 'Something In The Way' [*Nevermind*, 20th Anniversary; Universal 602527779041] sound quite as crisp and precisely delineated as they were through the Umami Black. Kurt Cobain's vocal, at times backed by long cello notes, was firmly positioned centre-stage, while the guitar accompaniment was rich with the sound of pick on string.

This remarkable level of resolution never once threatened to impact the musical performance. Instead, it simply made it more enjoyable, by bringing an even better sense of perspective to familiar tracks. Kari ⇨

DIAMOND LIFE

The cantilever is the single connection between the stylus in the groove and the coils that cut through the lines of magnetic flux. Ideally it must be both infinitely stiff and have vanishingly low mass – an impractical ask, to be sure, although a diamond rod gets closest in the trade-off between stiffness and density. Diamond's 1200GPa Young's Modulus is twice that of boron (a more popular choice), about 3x that of ruby or sapphire, and a full 15x that of aluminium, though, as mentioned, it is slightly denser, increasing the cantilever's mass.

The latter influences transient and HF response, so while a diamond cantilever shifts its own bending/twisting resonant modes out beyond the audioband, the designers' thinking must also turn to reducing the (moving) tip mass. Ortofon, for example, typically glues its styli in place [*HFN* Dec '22], minimising the 'size' of the diamond tip. Hana, instead, uses less glue but a slightly larger diamond tip that's bonded into a laser-cut hole in the end of the cantilever [see inset picture]. The diamond rod, in turn, connects to the square, carbon-infused nickel/iron armature, complete with 4N copper coils, via a duralumin sleeve. The latter side-steps the need for another glue joint while also providing additional high frequency damping – Hana uses the same technique to sleeve the boron cantilevers of its Umami Blue and Red models [*HFN* Dec '20]. The main damper – a black polymer ring – can be seen behind the coils. PM

RIGHT: The Umami Black's diamond cantilever is visible here protruding from the front yoke and fitted into a nickel/iron permalloy armature. At the rear, gold-plated pins are clearly marked

Bremnes' vocals on 'Ytterste Pol', from her 2009 album, *Ly* [Strange Ways Records], were vivid and focused, while Arve Henriksen's plaintive, rich trumpet cut through the shimmering, ethereal backing.

TINGLE TIME

Just as alluring were Laufey's vocals on her recent *A Matter Of Time* LP [Vingolf Recordings LAULP3]. The recordings of this magnificent Icelandic/Chinese chanteuse are typically mesmeric, thanks to her distinctive singing style, but with the Umami Black in charge her performance on 'Lover Girl' sent a tingle down my spine. The track's jazzy instrumentation was spread confidently between my speakers but the vocals were projected further into the room, giving her an almost eerie presence. It's no wonder I got a bit distracted…

The cartridge's combination of crisp high frequencies and fine tracking ability [again, see PM's Lab Report] allows it to capture the essence of an instrument, be it electronic or acoustic. The stereo soundstage is a touch less wide than those of one or two other cartridges I can think of, including my Ortofon Cadenza Black MC, but there's no doubt the detail within the acoustic spotlight is beyond reproach. The harpsichords in the 'Allegro' of Bach's Concerto in C Minor for Two Harpsichords and Orchestra [Nonesuch H-71019] were dynamic and natural sounding, the interplay between them fully on show. The string accompaniment balanced the performance, providing not just weightier, more sinewy tones, but also depth to the soundstage.

At this point, you might be thinking: sure, the Umami Black performs admirably when it comes to gentle and sophisticated, but can it boogie? Oh yes, it can indeed. From the first bars of Daft Punk's 'Give Life Back To Music' [*Random Access Memories*; Columbia 88883716861], Hana's top-flight cartridge grabbed onto the disco-throwback rhythm. That same clarity and openness that had worked wonders with the Bach piece was now contributing to a sense of impeccable timing, alongside a rich, deep and solid bass performance.

SMOOTH CRIMINAL

The Umami Black even proved capable of conjuring up a nicely 'dirty' character when required. 'I Can't Get With That', from the Fun Lovin' Criminals' *Come Find Yourself* [Chrysalis CRVC1437], was suitably languid and smooth, blessed with the suave groove that we have come to know from New York's finest. However, 'Scooby Snacks' added a grungy edge to proceedings thanks to some funky guitar work and its Quentin Tarantino film samples. The Umami Black – a transducer that seems able to make the best of anything – revelled in it.

HI-FI NEWS VERDICT

Hana's new Umami Black is not only a fitting flagship for the company's range of MCs, but it also looks likely to up-end some well-established competitors. The micro-engineering leverages over 50 years of experience and the results are obvious from the first few bars of music. While the Umami Red is a superb performer in its own right, the new Black raises that bar in every respect. Put simply – it's magnificent.

Sound Quality: 89%

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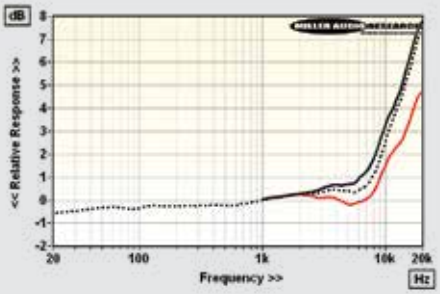
LAB REPORT

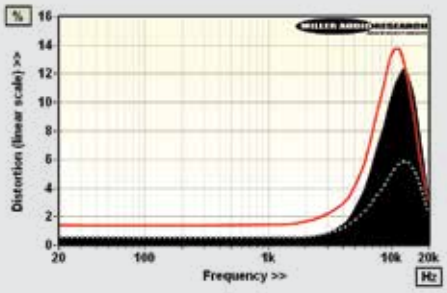
HANA UMAMI BLACK

While the square-section former and 90° coil windings of the Umami Black bear some similarity with those used in Skyanalog's MCs [*HFN* Mar '25 and Sep '24], and OEM derivatives like the Kensington C-600 [*HFN* Dec '25], Hana's open-format rare-earth magnet yoke structure is clearly different and specific to its models. We've also seen diamond cantilevers before [*HFN* Dec '22, and see boxout, p63] but the 'Microline' nude stylus is especially cleanly mounted in the Umami Black and this combination of a low tip mass with super-stiff cantilever delivers an exceptionally strong and extended HF response [see Graph 1]. There's excellent lateral/vertical symmetry here – promoting a uniformly deep and wide soundstage – but the right channel is still 'hotter' at +7.4dB/ 20kHz than the left at +4.1dB/20kHz. VTA is also slightly higher than expected at 25°, but equalised distortion remains impressively low [see Graph 2], and uniformly so up to ~2kHz (0.6% at –8dB re. 5cm/sec) with a peak of 6% at 12kHz on the right and 8.6% from the left.

Stereo separation is excellent at 35dB midband and output is close to Hana's 0.3mV specification at 290µV (re. 1kHz/5cm/sec into 100ohm), though the Black's channel balance could be tighter at 0.5dB. Either way, an MC phono stage offering 60-65dB of gain will be perfectly adequate for the Umami Black. Tracking performance is also very good indeed, the moderate 2.0g recommended downforce partially mitigating the low-ish 12cu vertical compliance. Unequalised distortion is a low 0.2% through the +12dB groove (re. 0dB at 315Hz/5cm/sec) while the Black holds on to the maximum +18dB modulation at ~1.3% THD without actually mistracking. This is a very fine performer. **PM**



ABOVE: Freq. resp. curves (–8dB re. 5cm/sec) lateral (L+R, black) vs. vertical (L–R, red) vs. stereo (dashed)



ABOVE: Lateral (L+R, black), vertical (L–R, red), stereo (dashed) tracing and generator distortion (2nd-4th harms) vs. freq. from 20Hz-20kHz (–8dB re. 5cm/sec)

HI-FI NEWS SPECIFICATIONS

Generator type/weight	Moving-Coil / 11.3g
Recommended tracking force	20mN (19-21mN)
Sensitivity/balance (re. 5cm/sec)	288µV / 0.5dB
Compliance (vertical/lateral)	12cu / 13cu
Vertical tracking angle	25 degrees
L/R Tracking ability	65µm / 70µm
L/R Distortion (–8dB, 20Hz-20kHz)	1.0-8.6% / 0.55-5.9%
L/R Frequency resp. (20Hz-20kHz)	–0.95 to +4.1dB / –0.7 to +7.4dB
Stereo separation (1kHz / 20kHz)	35dB / 24dB