

# Epos ES14N

A mid-'80s audiophile favourite from UK brand Epos is reimagined by the go-to-speaker designer, Karl-Heinz Fink  
 Review: **Jamie Biesemans** Lab: **Paul Miller**

Revivalist products are in the ascendant, but they range from the dubious, cashing in on nostalgia, to more respectful attempts aiming to recreate something remarkable from yesteryear. Rest assured – the ES14N is firmly positioned in the second category. In fact, it goes one step further by claiming to be both truthful to the design ethos of the original '80s speaker icon [see PM's boxout, p71], while also improving on it.

Of course, bold claims are hi-fi's bread and butter. But in this case, it's being asserted by Karl-Heinz Fink, who is not only the latest owner of the Epos brand, but also one of the most respected loudspeaker designers around. He's prolific too, as the Essen-based engineer has had a hand in many successful designs from brands including Boston Acoustics, Mission, Castle, Q Acoustics and Tannoy. Fink's own-brand Borg and KIM [HFN Feb '21] loudspeakers have also been very well received.

## OLD SCHOOL, NEW LOOKS

If you grew up with the original Epos ES-14 speaker, you might not recognise it from the reimagined version. It remains a relatively substantial standmount as the internal volume is largely determined by the bass/mid driver size and desired bandwidth. Otherwise, the ES14N looks less conventional, with its heavily chamfered baffle – Fink claims that this reduces treble diffraction more effectively than simply rounding the edges. The black baffle slopes backwards to align the centres of its 178mm bass/mid driver and 28mm alloy dome tweeter on top, the latter devoid of any (increasingly popular) dispersion-controlling 'waveguide'.

The faceted shape of the speaker is quite remarkable, especially in the lighter colour versions where the black baffle contrasts with the lower portion of the cabinet and sides. Epos provides three colourways: black, a semi-matt white and a gorgeous walnut version [pictured here]. For marketing

purposes a few units were built with a delicious petrol-blue finish. Apparently so many customers have requested this edition that a limited run of the colourway will also be offered.

## SMART FINKING

As the (vertical) off-axis response of the ES14N is rather less even than the direct output from the tweeter [see PM's Lab Report, p73], audiophiles should avoid forming an opinion of these speakers while standing around in a shop or at a hi-fi show. The ES14Ns should be facing your listening position as proscribed by the manufacturer, with the baffle angling up towards your ears. Epos supplies a set of 55cm stands for this purpose – these are lower than regular stands but are solidly built with a composite wood column and damped steel top and bottom plates.

Get rid of the speaker grilles while you're at it too, as these impact sound quality significantly. And removing them is rewarding on other fronts, as the exposed baffle with its broad chamfers in the sides looks really appealing. Of course, there's nothing done here purely for show – Fink's

expertise shows itself in the many fine details that inform the acoustic design.

Indeed, the chamfers are a big hint that the 'new' Epos hasn't just slapped a badge on any old speaker. Significant effort has gone into reworking the ES-14

blueprint using CAD and modelling tools that would have been the stuff of science fiction in the 1980s. At the speaker's press launch, Karl-Heinz Fink stated that 40 years of added knowledge have come into play too – loudspeaker design and research has evolved significantly since the appearance of Epos's original model.

**RIGHT:** An optional 55cm-high stand, made from wood and steel, is available for £650. The chamfered and angled baffle is finished in black but 'semi-matt' black, white and walnut colourways are offered for the main cabinet



The German engineer is focused on reducing cabinet resonances, and as with many of his other designs the ES14N features a very solid, inert construction using a double MDF layer bonded with a 'lossy' glue. Internally there's a single chamber, with no damping material, and a reflex port exiting the rear. From the outside the port aperture is clearly flared but otherwise looks perfectly 'standard'. On the inside, however, the variable diameter of the tube, and peripheral band of foam-filled holes, are all testament to Fink seeking to optimise the bass reinforcement while banishing unwanted resonances and turbulent airflow.

The variable-thickness polypropylene bass/mid driver, meanwhile, is impregnated with mica, terminated in a soft rubber surround, and driven via a two-layer 36mm voice-coil within a ferrite, rather than rare-earth type, magnet assembly. The pole-piece features a protruding metal phase plug that also serves to improve the unit's heatsinking. The partnering 28mm alloy dome tweeter is stiffened with a ceramic layer, has a fabric surround, and is protected by an oval-shaped perforated metal grill, the latter also factoring into the ES14N's elaborate sound tuning.

## PUNK ROCKERS

Performance, rather than nostalgia, was at the forefront of my mind when partnering this new Epos loudspeaker with NAD's C 658 DAC/preamp and EISA Award-winning C 298 [HFN Oct '21] Purifi-based power amplifier. Driven by this NAD combo, the ES14N showed itself to be a very capable performer, swiftly building up a dense and relatively expansive soundstage. There's the merest hint of extra warmth, but the overall balance is essentially 'flat'. Tonally, that is, not in terms of musical engagement!

It's a sound effortlessly compatible with the fat, analogue synths on 'Within' from the 10th Anniversary Edition of Daft Punk's *Random Access Memories* [Columbia 19658773731; 88kHz/24-bit]. There's not too much changed with the mastering of this disco-infused electropop classic from the now defunct French duo, but then again: who's complaining? 'Instant Crush' was as engrossing as ever via the ES14N, with the

## BACK TO THE FUTURE

Those readers with long hi-fi memories may recall the original ES-14 standmount from the pen of Robin Marshall, who founded Epos Loudspeakers forty years ago in 1983. Although the ES-14 sustained the Epos brand for a few years, it was not Marshall's first design – this was the larger ES-20 that, from contemporary accounts, failed to achieve the traction of its smaller, ported successor. The ES-14 featured an MDF cabinet, internally braced with a metal rod, and two custom-made drivers designed to operate over sufficiently wide bandwidths that a truly minimalist crossover – a single HP capacitor – could be employed. No attempt was made to 'time align' the drivers' acoustic centres, unlike the new ES14N with its sloping baffle, but both the 165mm mineral-loaded polypropylene bass/mid unit and 25mm aluminium dome tweeter were both advanced designs for the time.

In 1988 Epos was sold to Mordaunt-Short, then part of the TGI PLC group, with Marshall retained as designer. In the following years, before the Epos brand was sold to Michael Creek, of Creek Audio Ltd, Marshall's team created a number of related loudspeakers, including the even smaller (10 litre) ES-11 [HFN May '91] and larger floorstanding ES-22 [HFN Dec '95]. Nevertheless it is the ES-14 that's most fondly remembered by audiophiles 'of an age' and entirely fitting as the inspiration for the reimagined version reviewed on these pages. PM

nostalgic artificial-sounding voice of Julian Casablancas slightly emphasised ahead of the guitar solo driving in the background. Equally pleasing was the portion of massive midbass thump powering 'Lose Yourself to Dance', featuring Pharrell Williams, or the latter part of 'Touch', giving substance to these tracks without blurring their delicate

side. Yes, *Random Access Memories* has become a bit of an audiophile cliché, but revisiting it on these reimagined Epos speakers was certainly worth doing.

## CLEAN AND COHERENT

It's also one of those albums that just gets better when played loudly, and the ES14N is hugely satisfying when you turn up the volume as the lack of cabinet colouration keeps things clean. *Lamomali* [3ème Bureau 3345692; 96kHz/24-bit], from French pop superstar M, is another such set, its opening track 'Manitoumani' laying on vocals and string instruments atop a deep, bassy beat, yet even at near-apocalyptic SPLs the ES14N held its own. Coherence remained excellent at all times; it's music you're listening to, not discrete instruments clinically portrayed and alienating you from the performance. There's certainly no suggestion of distortion to mire the experience, either.

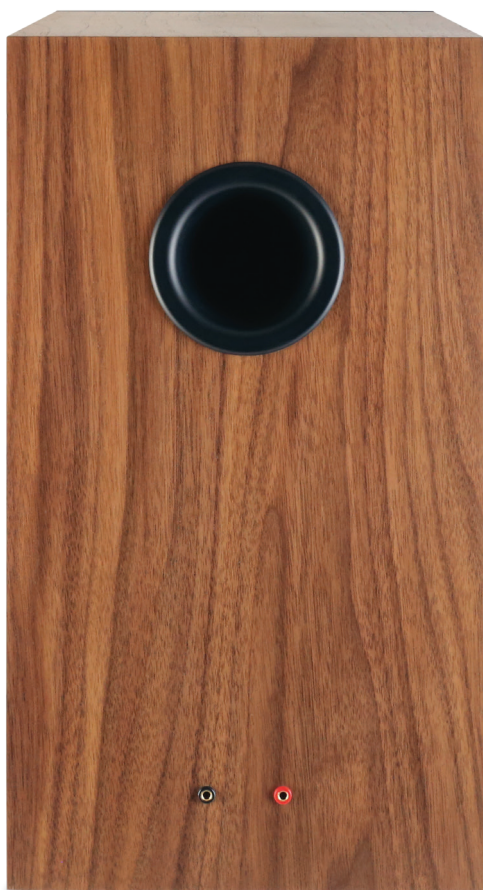
The ES14N's mellow midrange performance, together with a defined, clear low extension, was a boon when listening to *Halo* from Finish metal outfit Amorphis [AF0027DP; 48kHz/24-bit], especially during the anthemic 'On The Dark Waters'. The band dips →

**LEFT:** The 178mm (7in) bass/mid unit features a mica-impregnated, variable thickness polypropylene cone. An elongated magnet pole-piece 'replaces' a conventional dust cap/phase plug





# LOUDSPEAKER



**LEFT:** Rear shot of the walnut-finished cabinet reveals the flared port which is perforated to reject higher frequency resonance modes. Cable connection is via a single set of 4mm sockets for bananas only

*Me Home* [Nonesuch 075597915709; 96kHz/24-bit]. But considering the step up in terms of outlay compared to the NAD pre/power system, the differences were a tad less pronounced than I'd expected, suggesting the ES14N, although not the easiest to drive, is not the most difficult either. Nonetheless, there was betterment in terms of imaging, meaning Giddens' folksy collaboration with multi-instrumentalist Francesco Turrisi flowed elegantly, its beautiful intermingling of melodies easy to discern.

### TIME WELL SPENT

Next to the powerful singing of Giddens, a lot

of attention during recording was clearly given to the various stringed instruments Turrisi takes to hand. Textures and detail abound, nimbly recreated via the Epos speakers, resulting in them blending into an authentic and engaging experience. So, as romantic as returning to the '80s might seem, the ES14N proves the future has a lot to offer. Maybe not a flying DeLorean, but certainly better designed loudspeakers. 📶

deep into Finish mythology and folklore, distinguishing themselves from other Nordic troupes with the use of contrasting vocals styles throughout their epic songs – full-on death metal growls next to a higher-pitched melodic style. The switches from one to another, combined with rapid tempo changes and a double bass drum going wild, were handled very deftly by the Epos speaker.

### GOING WITH THE FLOW

Amazingly, all this crooning is done by one man, Tomi Joutsen, shifting gears in a way few singers could follow. The ES14N made it an exciting, dramatic listen, well-suited to a Friday evening after a busy week at work. It's a bit of a paradox that a genre heavily reliant on distortion pedals sounds the best on a loudspeaker that is very distortion-free and 'quiet' – which is very much what the ES14N is about. Metalheads and fans of overdriven guitars will love it, I wager.

Switching to a powerful Hegel H590 integrated amplifier [HFN Oct '18], there was added control and spaciousness to be heard with Rhiannon Giddens' *They're Calling*

### HI-FI NEWS VERDICT

Where many marketing-driven nostalgia projects underwhelm sonically, the reasonably priced ES14Ns are exceptional speakers, designed with experience and care. The design might suggest 'vintage', but the second coming of this classic performs on a level many 'modern' loudspeakers don't reach. If you prefer your music delivered without embellishment but with real engagement, you'll love owning a pair of these.

Sound Quality: 88%

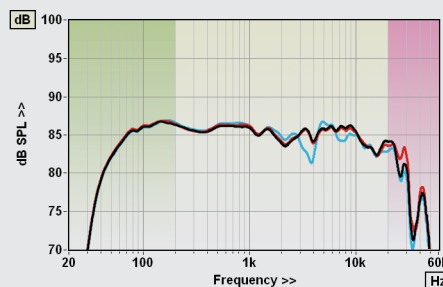


## LAB REPORT

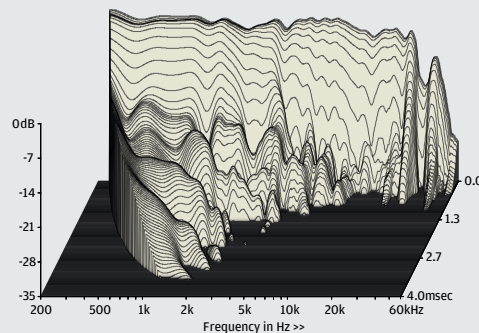
### EPOS ES14N

The combination of the ES14N's relatively compact enclosure and 178mm mica-loaded polypropylene bass/mid driver does not scream 'high sensitivity'. So, while Epos specifies 87dB/2.83V at 1m, our tests suggest 86.2dB/1kHz is closer to the mark, or 85.5dB (500kHz-8kHz) reflecting the slight dip in output before the 28mm alloy/ceramic tweeter takes over above 2.7kHz [see Graph 1]. The tweeter's response roll-offs above 10kHz to -3.5dB/16kHz but rallies somewhat at 20kHz prior to the very well damped resonance at 29kHz [pink shaded area, Graph 1]. This is also visible on the CSD waterfall [Graph 2] which illustrates the generally disciplined behaviour of both drivers within the audioband. Even with this sweetened treble, the mere ±1.9dB response error reveals the impressive uniformity of the ES14N's output, just as the astonishingly tight 0.35dB pair matching indicates excellent production QC. The grille is purely protective and contributes to a ~3dB dip from 3-4kHz [blue trace, Graph 1].

Given the modest sensitivity, 2nd/3rd harmonic distortion is low at <0.3% (100Hz-8kHz re. 90dB SPL/1m) while the speaker's impedance is an undemanding 6ohm nominal – the minimum of 4.3ohm/160Hz shifted from the maximum +50°/-63° swings in phase angle to deliver a very 'driveable' EPDR of 1.8ohm/106Hz. Furthermore, Fink has flattened the ES14N's reactance so its impedance holds to 7-8ohm from 500Hz-8kHz. Enhanced bass extension is another bonus. The bass/mid unit has a 57Hz-460Hz bandwidth (-6dB) – free of cabinet and reflex tube modes – the latter tuned to 37Hz to render a diffraction-corrected extension of 42Hz (-6dB re. 200Hz). This is an expertly-crafted two-way. PM



ABOVE: Response including nearfield bass / mid driver and port [green], freefield corrected to 1m at 2.83V [yellow], ultrasonic [pink]. L, black; R, red; w.grille, blue



ABOVE: Aside from some minor modes (500Hz-10kHz), the ES14N is free of substantive resonances

### HI-FI NEWS SPECIFICATIONS

<b>Sensitivity</b> (SPL/1m/2.83V - 1kHz/Mean/IEC)	86.2dB / 85.5dB / 83.6dB
<b>Impedance modulus: minimum &amp; maximum</b> (20Hz-20kHz)	4.3ohm @ 160Hz 30ohm @ 64Hz
<b>Impedance phase: minimum &amp; maximum</b> (20Hz-20kHz)	-63° @ 77Hz +50° @ 20Hz
<b>Pair matching/Resp. error</b> (200Hz-20kHz)	0.35dB / ±1.9dB/±1.9dB
<b>LF/HF extension</b> (-6dB ref 200Hz/10kHz)	42Hz / 26.2kHz/27.0kHz
<b>THD 100Hz/1kHz/10kHz</b> (for 90dB SPL/1m)	0.3% / 0.25% / 0.65%
<b>Dimensions</b> (HWD) / <b>Weight</b> (each)	491x250x385mm / 16kg