

Mark Levinson N°536

With no little irony, Mark Levinson releases a monster of a monoblock power amplifier, its design team headed by a long-term Krell veteran – say hello to the N°536

Review: **Ken Kessler** Lab: **Paul Miller**

For a decade or two, the heaviest hitters in high-end amplification were Mark Levinson and Krell. Forty-three years after the birth of the former and 36 with the latter, we find that the Mark Levinson N°536 monoblock power amplifier has been designed by an engineer who had worked for Krell for a total of 21 years. Although Todd Eichenbaum, Director of Engineering, Harman Luxury Audio, has been with the brand since 2013, those two-decades-plus have made an indelible impact.

Not to suggest that there's anything immediately 'Krell-ish' about this £14,000 unit. It looks like a Levinson and one of the explanations for its existence describes delving into the brand's past. And while it isn't the Class A design that launched the brand, neither will it strike the Levinsonian audiophile as something alien.

Its 400W nominal rating proves very conservative [see PM's lab report, p43] and its build, from the finger-slicing alloy heatsinks that flank its carcass to that thick, precision-milled black/silver fascia, all speak of a very serious intent. As does the massive power supply which is seen in our internal shot [right].

Not competent enough to decipher his AES paper, I spoke directly with Eichenbaum about the project, which editor PM points out had the gestation period of an elephant. 'This amp was announced over a year before it was finally launched – why?' lamented PM. It sounds like Mark Levinson wanted to make sure that this new amp was spectacular, a tacit way of saying that the brand has been quiet of late, and this is all but a re-boot in name. Todd Eichenbaum was not going to be rushed. He said he had several goals for the N°536.

'First, I wanted to recreate some of the "magic" that I remembered hearing for the first time more than 30 years ago – the

very first time I listened to Mark Levinson electronics.' The depth and space were unlike anything he'd heard before, 'And relatively few systems I've heard in the decades since have been that good.'

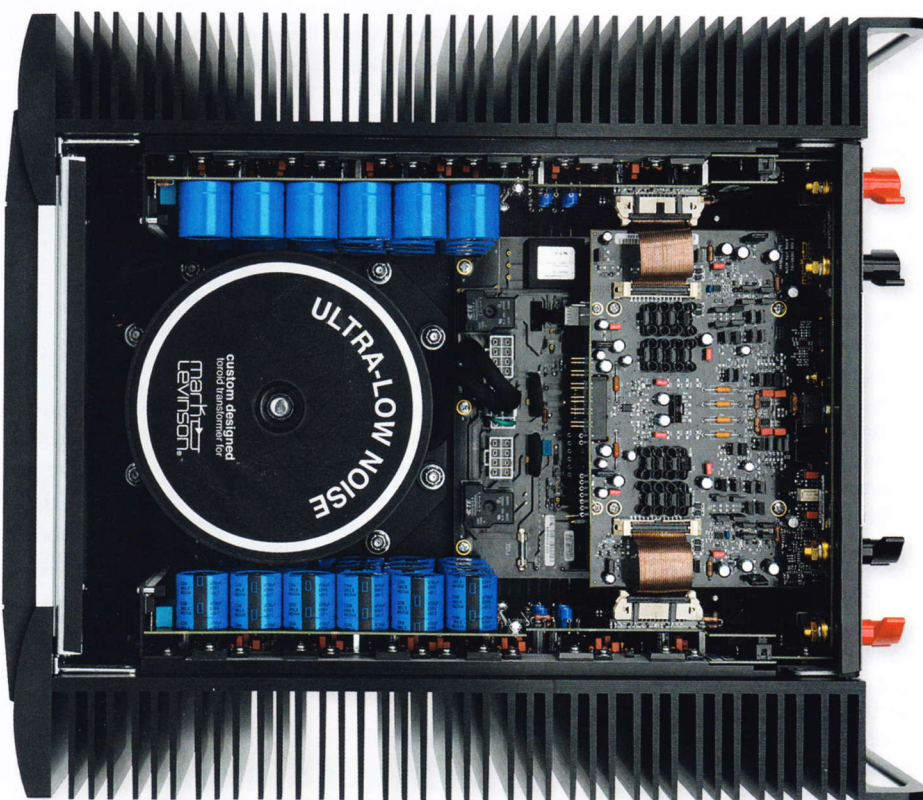
KEEPING THE DNA

Second, he wanted to apply design techniques that he and the engineering team had learned over the years to 'bring the new Mark Levinson products to the "next level" of performance and convenience while still maintaining much of the DNA in the Mark Levinson sound.'

Lastly, he wanted to design the N°536 'to be inherently robust and reliable, straightforward to assemble and test, with processes and measurements that are consistent and repeatable day in and day out.' This additional testing regime certainly extended the time before the eventual release of the amplifier.

While the earlier, vertical-chassis No53 Class D monoblock power amplifier [HFN Jan '11] still sits at the top of the tree pricewise, the newer and more affordable N°536 is clearly the *de facto* flagship. So the N°536 differs from its immediate predecessors in a number of ways. Says Eichenbaum, 'The gain stages in earlier generations of Mark Levinson amps had more complex signal paths and much higher open-loop gain and feedback. Our new Pure Path topology is based on the philosophy that the signal path should be – and here he quotes Einstein – 'made as simple as possible, but not simpler.'

'In this case the main building block is a very high quality dual J-FET, connected to several bipolar transistors in a multiple cascode configuration.' Here he wanted to obtain the best qualities of all the transistors, combined to form 'what is functionally a dual "super" transistor.'



RIGHT: Massive 1800VA toroidal transformer is at the heart of a PSU that drives a fully symmetrical (balanced) 2x12 high current transistor, Class A/B output stage



The Levinson team allied this with an improved current mirror design to create a gain stage that promises extremely good linearity and wide bandwidth, before applying any negative feedback to the amplifier. Inside each N°536 are two bridged power stages each comprising six pairs – that's 24 in total – of high current, bipolar output devices, and each with its own driver transistor. A limited 16dB of negative feedback is applied around the amplifier circuit, which Eichenbaum feels, 'gives us the best combination of image depth and space, bass extension, and dynamics.'

'Wedded as I am to valves, I like to dance with the devil, too'

IMPECCABLY BEHAVED

While *HFN* awaits the forthcoming matching preamp/DAC, I used the N°536 with 2m lengths of Crystal cable to the Wilson Alexias [*HFN* Mar '13], and drove it in balanced mode with the Audio Research REF 6 preamp [*HFN* May '16], via Transparent. Sources included the SME

Model 30/12 with Series V-12 arm and Clearaudio Goldfinger MC [*HFN* Jan '15] into the EAT E-Glo phono amp. Digital playback came via my trusty Marantz DV8200 SACD/DVD player. Hook-up was a joy, thanks to the substantial binding posts and switchable balanced or single-ended inputs. (Note that the USB connector on the back is for firmware upgrades, not for use with a USB audio device.) Switch-on involved watching the LED on the front, which glows blue, red or white or flickers,

depending on whether the amp is in standby, operational, or behaving badly.

If you're expecting me to wax glorious about blasts from the past, and how I can see the form of former Krell supremo Dan D'Agostino – let alone John Curl – hovering overhead, well, you're right: this sounds like an amplifier from the period I prefer for bad-ass, overkill, solid-state amps. So let's make one thing clear: as wedded as I am to valves, I like to dance with the devil, too,

ABOVE: Two required for stereo, this imposing monoblock amplifier features Levinson's latest black and silver industrial design – an all-alloy chassis with precision, side-mounted heatsinks

like the guy whose heart belongs to Alfa Spiders and TR3s, but doesn't mind a blast in a muscle car to clear the sinuses.

This amplifier doesn't need ages to warm up, and after a fierce eight-hour session, it didn't singe flesh. Indeed, its behaviour was utterly impeccable throughout. Its visual impression is perhaps one of brutality, and I scared myself when trying it with the KEF LS50s [*HFN* Jul '12] – what would happen if I switched sources and blasted its 400W+ into a small standmount? (The amps did sound sensational through the wee KEFs, though I doubt anyone normal would match a sub-£1000 speaker with a £14k monoblock.)

KICKS LIKE A MULE

It took, oh, three seconds into 'Rock The Boat' by The Hues Corporation, in both digital and analogue forms, side by side – *The Very Best Of The Hues Corporation* [Camden 74321 603422; CD] and *Freedom For The Stallion* [RCA APL 1-0323; LP] – to realise two things simultaneously. The N°536 kicks like a mule, and it's incisive enough and transparent enough to lay out the differences between CD and LP in such vivid terms that even the most fervent disbelievers would be staggered by the disparities.

What springs to mind most frequently is the term 'commanding', but not in the grab-the-listener-by-the-throat method of hyper-etched designs. Indeed, the resolution of strings at the upper reaches was almost a bit hazy, but one could equally say that it was non-fatiguing. ➔

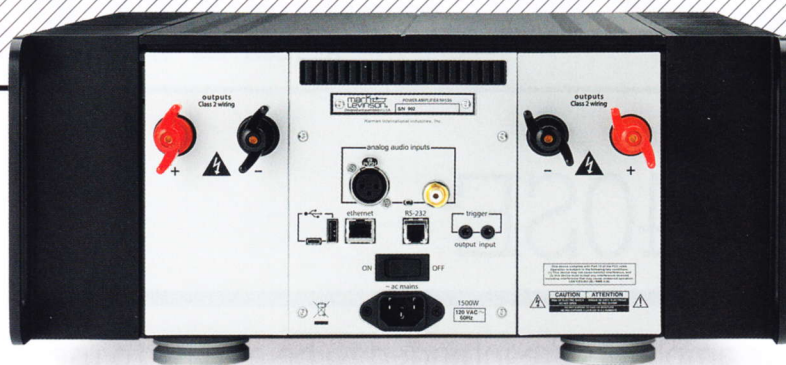
HARMAN LUXURY AUDIO

In specialty audio, it doesn't get any bigger than Harman International Industries, Inc, Mark Levinson's parent company. If my sources are correct, the company, with sales of US \$5.9 billion during the year ending 31 Dec '14, is roughly the size of Bang & Olufsen and Bose combined. Its roots can be found in a name familiar to older audiophiles, harman-kardon (with lower-case 'h' and 'k', thank you very much). Sidney Harman and Bernard Kardon founded the amplifier manufacturer in 1953. Both were ex-Bogen engineers, and their eponymous brand is considered one of the key names in the founding of high-end audio. Harman bought out Kardon in 1956, and the company just grew and grew. In its latest form, it designs, manufactures and markets equipment in other fields as well, including A/V, in-car and professional markets. Its brand portfolio includes AKG, Harman Kardon, Infinity, JBL, Lexicon, Mark Levinson and Revel. Quite a roster.

MARK LEVINSON N°536

Such is Levinson's (Harman Luxury Audio's) painstaking production engineering process, I had been waiting over a year to get its flagship monoblock power amp through the lab doors and on to our front cover. I'm pleased to report that the wait has not been in vain for the N°536 massively exceeds its specification. Rated at 400W/8ohm and 800W/4ohm, it achieves 530W/8ohm and 870W/4ohm at <1% THD with sufficient reserves to accommodate 610W, 1115W and 1935W (or 31.1A) into 8, 4 and 2ohm. Short-circuit protection kicks in above 440W/1ohm [Graph 1, below] but the N°536 is surely capable of more. Furthermore, despite the close proximity of this massive power supply, noise is exceptionally low at -85.7dBV (52µV) and the A-wtd S/N ratio very wide at 98.7dB (re. 0dBW) – this is a silent giant!

Via its XLR inputs, overall gain is an appropriate +25.6dB (151mV for 0dBW) from a fully balanced output stage comprising no fewer than 24x15A devices. Loop feedback is modest but while the output impedance is not vanishingly low it is a uniform 0.07-0.08ohm from 20Hz-20kHz, increasing to 0.125ohm/100kHz. The frequency response is very flat and extended with -0.5dB points at <1Hz to 75kHz and falling to just -0.9dB/100kHz. So there's very little attenuation of ultrasonic output from SACD/DSD sources here... This is of potential interest because distortion, again not vanishingly low but consistent at ~0.01-0.02% from 20Hz-3kHz (an elegant 2nd and 3rd harmonic only), rises very steeply at high frequencies – 0.05%/10kHz, 0.12%/20kHz to 0.4%/40kHz at 10W/8ohm [see Graph 2, below]. Choice of partnering source (DAC) and loudspeaker will be key to optimising its performance. PM



ABOVE: Pairs of 'hurricane' cable binding posts support bi-wiring. Single-ended (RCA) and balanced (XLR) inputs are joined by Ethernet, RS232 and 12V system triggers

At the bottom end, the balance between openness and near-papery dryness was near perfect, such that the pure percussion extravaganza of Kodo's *Heartbeat: Drummers Of Japan* [Sheffield Lab CD-KODO] was a display of woofers shifting air. And it was here that I was glad I swapped the KEFs for the massive Wilsons!

AN AMP THAT SWINGS

What was emerging, based on notes I'd taken over the years, were not dichotomies so much as schools evolving within amplifier types. And I mean the nature of the sound more than the circuitry. With modern champions like Constellation, Soulution, Chord, D'Agostino, McIntosh, darTZeel and a number of others utterly destroying the notion of 'solid-state' sound, such that valve lovers have to accept levels of previously unavailable warmth, the N°536 has arrived at a fecund time.

On the one hand, the Levinson's job is made easier by the quality now expected of such amplifiers, which it certainly delivers. On the other, the competition is tougher than ever before, and listeners are forced not to search for absurd measurements and hyper-naked sound, but to accept and/or prefer sonic 'personalities' – and therefore the differences – of each amp.

Listening to Dino, Desi & Billy's *Our Time Coming* LP [Reprise RS-6194], recorded when McIntosh tube amps were the peak of sonic attainment, the N°536 treated the all-analogue, wide open sound with a delightfully airy presentation. Not, I hasten to add, the clean-scrubbed effect of digitalia or overly-analytical systems, but a sound akin to the big transistor darTZeels. The irritating teenage squealing of their voices, against the best session men ever seen in LA, was a portrayal of textures that made you want to find

a pair of Stax 'phones or Quad 57s: subtlety where none should exist.

But move on to something with the same sound quality yet musical merit without peer, and you have – in The Band's 'Up On Cripple Creek' [The Band; Mobile Fidelity UDSACD 2129] – a sound reminiscent of a big Chord, if not quite the limitless slam.

Again, it was back to Levon Helm's kick-drum for the N°536 to do its stuff, and it did so with enough detail to imagine his foot pedal, and enough dynamic scale to provide all the punch. Even twangy Jew's harp, that least expensive and least complex of instruments, acquired a weird majesty all its own.

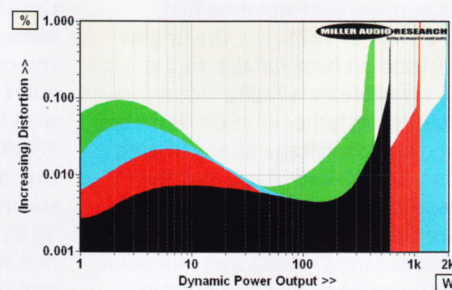
Saving Dianne Reeves and Lou Rawls' *At Last* [Blue Note CDP 7 91937 2] for the end, the vocal duet in the title track revealed a sweet, natural-sounding midband that was able to juggle such disparate voices with ease. I kept reminding myself that this pair of amplifiers together costs less than a number of single-chassis stereo rivals, and yet it gives you the channel separation that only monoblocks can. Dianne and Lou, apart yet together: this amplifier pair truly swings. ☺

HI-FI NEWS VERDICT

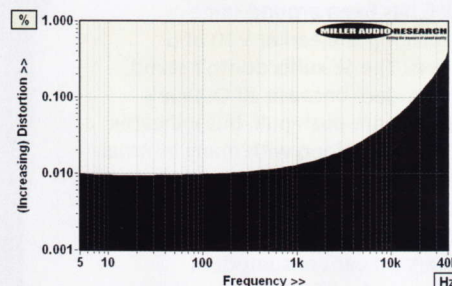
It's not as schizophrenic as you think, and I am not calling it a 'Krelvinson', but the N°536 does exhibit the effortless power delivery associated with the post-Class A Krells. Interesting, too, the amp possesses a smoothness and warmth to counter its sheer muscle, so those old 'fist in a velvet glove' analogies complete the retro vibe. Best of all? For two monoblocks of this calibre, the price is kinda retro, too.

Sound Quality: 88%

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ABOVE: Dynamic power output versus distortion into 8ohm (black trace), 4ohm (red), 2ohm (blue) and 1ohm (green) loads. Maximum current is 31.1A



ABOVE: Distortion versus extended frequency from 5Hz-40kHz at 10W/8ohm

HI-FI NEWS SPECIFICATIONS

Power output (<1% THD, 8/4ohm)	530W / 870W
Dynamic power (<1% THD, 8/4/2/1ohm)	610W / 1115W / 1935W / 440W
Output impedance (20Hz-20kHz)	0.066-0.077ohm
Frequency response (20Hz-100kHz)	+0.00dB to -0.93dB
Input sensitivity (for 0dBW/400W)	151mV / 2995mV (balanced)
A-wtd S/N ratio (re. 0dBW/400W)	98.7dB / 124.7dB
Distortion (20Hz-20kHz, 10W/8ohm)	0.0093-0.11%
Power consumption (Idle/Rated o/p)	213W / 840W (each)
Dimensions (WHD) / Weight	451x194x504mm / 53kg (each)