

PREAMPLIFIER

Dual-mono preamplifier with outboard PSU
Made by: D'Agostino LLC, Connecticut, USA
Supplied by: Absolute Sounds Ltd
Telephone: 0208 971 3909
Web: www.dagostinoinc.com; www.absolutesounds.com
Price: £159,500

AUDIO FILE



D'Agostino Relentless Preamp

It's taken three years, but it was worth the wait: D'Agostino's Relentless Preamplifier has arrived, and it's as much of a revelation as the matching power amplifiers
Review: **Ken Kessler & Paul Miller Lab: Paul Miller**

You gotta love items with absolutely perfect names: 'Land Rover Defender', 'Rolex Explorer', 'Fender Jazzmaster'. When founder and chief engineer, Dan D'Agostino, dubbed his assault on the high-end 'Relentless', with cost-no-object flagship monoblock power amps [HFN Mar '20], he might have been referring to himself, as that is how he approached the task. With this matching three-chassis Relentless Preamplifier (£159,500), he's raised the bar once more.

Yes, it is again all about bar-raising. The power amps elevated solid-state, high-power performance to levels so utterly inconceivable that the usual topics of audiophile debate were thrown out along with any concessions to size, weight, hi-fi fashion, or biases [see PM's boxout, p41]. Aside from a choice of black or silver, both with copper accents, Relentless is aimed at clients who accept unreservedly Dan's balanced-only dicta. As I said: relentless.

HAUTE CUISINE

For the Preamplifier, the recipe is the same: over-engineered, hugely heavy, and bravely – for domestic audio if not for studio applications – XLR-balanced-only. Of course, phono-to-XLR adapters do work, should you have a much-loved, RCA-only CD player, etc.

At first sight in the HFN demo room I thought the top and bottom chassis of the three-box stack were power supplies. It was those massive meters on each, styled after Breguet pocket watches of the late 18th century, the big 'moon' hand against a round, illuminated display with rotary bezel. But these are the 'left' and 'right' channel preamps, and the dials are synchronised volume controls. The lighting changes colour or flashes depending on the function, with deep green by default, red if phase-inverted, flashing red for mute, etc. They can be switched off entirely if

RIGHT: Inside the PSU/logic enclosure (centre chassis, p41) with regulated supplies for digital [left] and analogue [right], and comms bus [centre]. Streaming module will sit in the void [near left]. Note remote Bluetooth receiver [top]

desired. Each button on the centre PSU and logic section also lights up in different colours to indicate source, zone, mute or other functions.

Cleverly eschewing cabling between the three sections, the two mono preamp chassis form a sandwich with the power supply/control section inbetween. The internecine communication is a nifty party piece: spin either unit's copper rotary to change level and watch the needle on the other respond in step. Balance is adjusted by holding one while turning the other.

Here's how they stack: each chassis has four round metal feet that nestle into circular apertures in the top surface of the chassis beneath. Two of the front left feet contain interlocking gold-plated 30-pin aerospace connectors to communicate with the unit above or below – these carry logic commands only, not audio.

Another useful feature, especially as deep-pocketed owners are likely to have commensurately grand homes, is its 'Dual Zone' functionality. This provides not just two playback zones, but independent sources for each. You can listen to a source in one room, while playing something else entirely in Zone 2. Ordinarily, either volume control will adjust levels in the main room (or Zone 1). When two-zone operation is employed, the upper volume control manages Zone 1, while the lower chassis' volume control adjusts levels in Zone 2. I'd hope the second zone would be powered by a brace of Relentless monoblocks, too...

BLUETOOTH REMOTE

Although the new Relentless remote [p45] was not available to us, all of the functions will be accessible through it. This controller features a touch pad, while Bluetooth



LEFT: Chassis are milled from aerospace aluminium while the rotaries are fashioned from copper-plated brass to give the volume control some 'heft'. All logic/PSUs are in centre chassis

Designed to fit into the centre chassis, the Digital Streaming Module (DSM), however, is nearly ready, possibly soon after you read this, priced at £15,950. As such, the DSM will remain completely isolated from the analogue preamplifier circuits. It is fully-balanced, with one DAC per channel, claiming to support 768kHz/32-bit LPCM, DSD256 (network) and up to DSD 512 (USB-B). It will address Tidal, Qobuz, and Spotify streaming services via a custom iOS app, with USB, optical, coax, Ethernet and Wi-Fi connectivity, as well as Roon certification.

connection eliminates range and line-of-sight restrictions. Adjustments made on the Relentless Preamplifier's panel(s) are fed back to the remote control's display screen, including input, volume, and balance selections.

Alongside the familiar 12V trigger and software update connections, additional DC outputs are included [see p45] to service a forthcoming phono preamp and other potential additions to the Relentless range.

Dan D'Agostino told HFN that work has not yet begun on the phono stage but, 'We have some interesting concepts I am eager to explore for this future product'.

TRANSCENDENTAL

If you find the following notion specious, please forgive me, but I'm convinced that experienced listeners know *within mere seconds* what a component, system or even a new LP or CD sounds like in terms of quality, presuming the system is burned-in and warmed up, of course. What brought this home in force were the first few notes of Booker T. & The M.G.'s' 'Soul Limbo'

[Stax Gold – Hits 1968-1974; Stax CDSXD 043]. They possessed such ineffable presence that I wished I could go back and praise the Wilson Alexx V [HFN Jan '22] – still in situ along with D'Agostino's partnering Relentless monoblocks [see p3 and p39] – with even greater fervour. The bottom end (and I am no bass addict) was so truly visceral and free of artifice or grain that I was transported back a month to a live concert, where I sat as close to the orchestra as I was to these speakers.

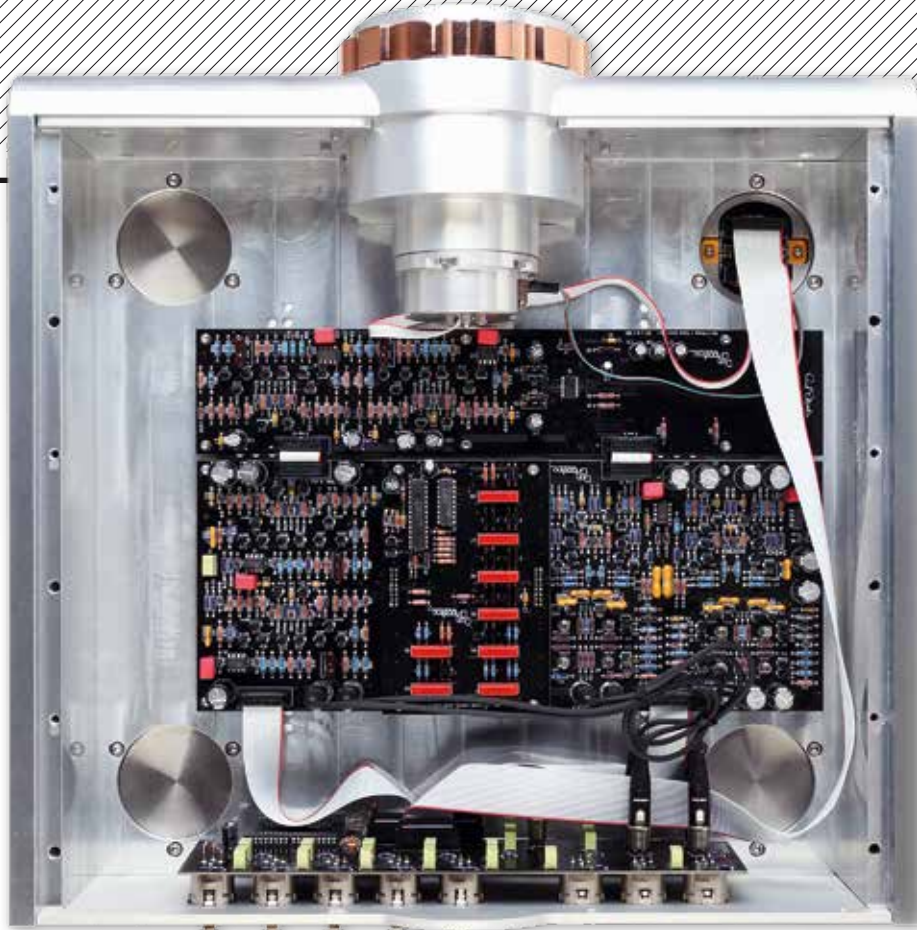
It wasn't just the realism of the sound. Clearly, both Wilson CEO, Daryl Wilson, and Dan D'Agostino are disciples of the belief in the importance of soundstage recreation, and how correct physical placement of the sounds and their dimensions impact on tonal qualities. With stereo playback, you can't have one without the other. ☺



ULTIMATE POWER

The natural partner for the Relentless Preamp? The Relentless monoblocks, of course [see p39]... These quarter-tonne behemoths were first seen and heard at our UK Hi-Fi Show Live in 2019 and graced our cover exactly two years ago [HFN Mar '20]. The experience left its mark, although the massive rollercoaster of a sound was seemingly all the more visceral, gripping and spatially adventurous when partnered this time around with Wilson's fabulous Alexx V floorstanders [HFN Jan '22] and the newcomer Relentless preamp, all laced with Transparent Audio's Gen 6 interconnect and speaker cable.

Two years on and *Hi-Fi News* remains the only hi-fi resource to have tested the Relentless monoblocks. In short, this amplifier is the most powerful and load-tolerant in current hi-fi memory, besting even Musical Fidelity's Tri-Vista kW [HFN Aug '03]. D'Agostino quotes 1.5kW/8ohm, doubling to 3kW/4ohm and 6kW/2ohm although we obtained a slightly higher 1.61kW/8ohm and lower 2.73kW/4ohm. Moreover, under dynamic conditions, its massive PSU serves up 1.74kW, 3.35kW, 6.36kW and 11.33kW into 8, 4, 2 and 1ohm loads, respectively – equivalent to 106.4A (10msec at <1% THD)! However you look at it, the Relentless amplifiers will surely drive any high-end loudspeaker with unwavering confidence. PM



DAN D'AGOSTINO

'The inspiration for the Relentless Preamplifier actually started with our Momentum Phonostage', confirmed founder Dan D'Agostino during our January Zoom call. 'The phono's front-end circuit used parallel FETs – we could add multiple pairs without any increase in capacitance and the negative bandwidth effects that would come with bipolars. The result was a combination of extremely low-noise with a striking dynamic output', claims Dan.

'From there, I couldn't resist trying it in a preamplifier circuit. The Momentum Preamplifier was the first one to benefit from this FET input stage, becoming the Momentum HD in the process [HFN Apr '20]. However, I knew we could achieve more starting with a blank slate and additional real estate to fully exploit the benefits of our FET concept.'

So will we see this FET circuit exploited in other line stage applications? 'Certainly', declares Dan, 'we've already inserted an additional FET stage between the DAC output and the Relentless Preamplifier circuitry in our forthcoming Streaming Module'.

Dan's outboard Phono Preamp ('I haven't had time to think of another name yet', he admits) will be the next component in the Relentless series, powered off the back of the Preamplifier [see pic, p45]. RIAA equalisation will be all-passive, sandwiched between two 'Relentless' FET stages and offering a total +70dB gain. 'It'll be MC only', says Dan. 'And more to come?', I ask. Dan pauses... 'Yes'. PM



The uncanny element imparted by these Relentless amplifiers was a sense that, in the best possible way, the performance hung in space independent of the speaker location. Simply, the system disappeared and the scale was realistically large.

SUSPENDING BELIEF

Given that those first few moments showed me enough about the system's soundstage capabilities, confirmed repeatedly from track-to-track, it was a 68-year-old mono recording which had me shaking my head in disbelief. I had already been subdued into new levels of respect by other familiar tracks – dozens of them.

Juice Newton's soaring 'Break It To Me Gently' from her *Greatest Hits* CD [Capitol CDP746489 2] exhibited even greater power and clarity than I had experienced through a thousand hearings. I sat there dumbfounded by the sheer weight of Kodò's *Warabe* [Sony SRCL4671], the dimensions of the performance transcending the speakers with such abandon that I was transported to the live experience, while the weight was overwhelming – as it should be.

Then I heard Lou Rawls sharing lines with Dianne Reeves on *At Last* [Blue Note CDP7 91937 2], a sound so authentic and realistic as to shock, but that ancient, ultimate test? I would soon realise that I may never hear better in the time still allotted to me. Morbid, perhaps, but true.

ABOVE: Inside one of two identical preamp chassis. Volume adjustment uses relay-switched resistor ladder [red, centre]. All-discrete circuit has a FET input and differential bipolar output

On how many occasions and through how many systems have I heard The Chordettes' 'Mr Sandman'? I never settle down for a session without the *All-Time Greats* CD we gave away in 1994 [HFN/Ace Records, ACE 01]. I play the song repeatedly, an invited ear-worm, but even so, I was not expecting to discover subtle

'I was carried back to a recent live performance'

details that had not been previously exposed. Neither have I ever heard mono so grandly wide and deep that the thought of 'I wish it was in stereo' never even crossed my mind. What this impressed upon me in particular was

the measure of the Relentless amplifiers' transparency, recalling those old clichés about 'lifting veils'.

Those little sounds I'd previously missed forced me to reassess my already-high opinion of Cadence Records' recording capabilities in the 1950s – and it was already stratospheric. Remember: this is mono, for goodness' sake, yet one could separate the voices with as much ease as if they were arranged across the listening space in a left-to-right array. And when Cadence's founder, Archie Bleyer, uttered that deep-as-Isaac-Hayes 'Yes?' in the third verse, it hovered *above* the rest. ↻

LAB REPORT

D'AGOSTINO RELENTLESS PREAMP



ABOVE: All switching/phase invert and other logic controls are fed alongside PSU rails through connectors in the top plate and front left foot of the centre unit. The top (left channel) and bottom (right channel) preamps offer five balanced inputs, two Zone 1 and one Zone 2 balanced outputs. Remote is via Bluetooth control

It was growing perilously close to a metaphysical experience, though I am hardly a spiritual soul. Having recently acquired the open-reel tape which gave us BB King's peerless performance of 'Don't Get Around Much Anymore', which I was generously allowed to include on the same CD, I knew *exactly* how amazing it sounds. Or so I thought. I ended up kicking myself for not having the tape present at the listening sessions because there were details and a richness here I hadn't heard before.

MILLION DOLLAR MUSINGS

So, I had to contain my reel-to-reel bias and simply marvel at how good the CD sounded, via the Relentless Preamp and part of a system costing – literally – a million bucks,

or circa £800,000 in our money. The transfer to the *HFN/RR* freebie was better than I could have imagined after 28 years: gloriously wide, warm and as in-the-room as it gets. The stage width, the sense of air – again, the music appeared to float, detached from the hardware recreating it. And that is the magic. There is no other word for performance this ethereal.

But I had one other regret as I wallowed in BB King's sublime vocals: I wished the late Dave Wilson could have heard not just what son Daryl had created, but how his friend Dan's Relentless amplification managed to wrest more from the Alexx V than PM or I – or perhaps even Daryl – could imagine. ☹

HI-FI NEWS VERDICT

With the Relentless Preamp, we are entering a parallel realm with the likes of Bugatti's Chiron Super Sport 300+ hypercar – a world previously unexplored and unattainable. The evidence is in the sound as much as the physical presence of the preamp itself – true 'audio jewellery'. Sonically? Utter freedom from dynamic compression, distortion, or even soundstage boundaries. We are truly stunned.

Sound Quality: 95%

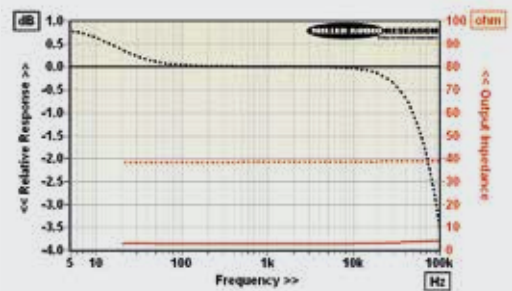


ABOVE: Machined to match the preamp, D'Agostino's extravagant touchscreen Bluetooth remote accesses volume, mute, balance, input and absolute phase

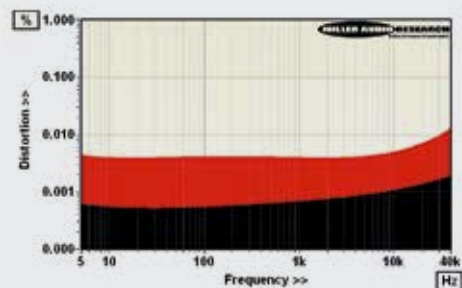
As we saw with the D'Agostino HD Preamp [*HFN* Apr '20], the Relentless Preamp's watchface dial(s) indicate the available preamp gain rather than absolute level. The 'numbers' and gain are different in this flagship model, however, with '99' representing a default +5.4dB gain in our early sample (+8dB is claimed), '76' being unity (0dB) gain – below which the Relentless Preamp operates as an active attenuator. So, '64' delivers –6dB gain (or x0.5) in this instance.

The two controls are synchronised, each rotary encoder switching through a matrix of resistors [see picture, p43], but as the top 'bit' was not enabled in this early sample there was no attenuation from '99' down to '86'. The ± 0.5 dB steps kicked-in from '85' down to '26' (31dB range), with coarser 1.1dB steps to '12' (14dB range) and 2dB steps down to '06' (12dB range). The steps from '05' to '01' ('00' is a relay-switched mute) are less well-defined but represent a range of ~ 9 dB. D'Agostino informs me that the 67dB volume range will be increased to ~ 75 dB and the 86.5dB A-wtd S/N ratio (re. 0dBV) boosted to ~ 95 dB once the anticipated full gain of the Preamp is realised.

More importantly, from a sonic viewpoint, the output buffering is more rigidly enforced here, its 2.5ohm source impedance much lower than that achieved by the HD Preamp [red traces, Graph 1] and its ruler-flat (± 0.04 dB/1Hz-100kHz) response [black trace] unchanged across the entire volume range. Distortion, too, is both very low and 'flatter' vs. frequency at 0.0006-0.0014% (20Hz-20kHz) and 0.002%/40kHz while the HD Preamp offered 0.0003-0.0025% up to 0.011%/40kHz. Note that the 'right' channel had marginally higher THD [Graph 2]. PM



ABOVE: Balanced line freq. resp. (black) and o/p imp. (red) at 0dBV (Relentless, solid; HD Preamp, dashed)



ABOVE: Distortion versus extended frequency at 0dBV (Balanced in/out; left, black; right channel, red)

HI-FI NEWS SPECIFICATIONS

Maximum output (<1% THD, 47kohm)	>24Vrms (Balanced)
Maximum input level (<1% THD)	>12Vrms (Balanced)
Output impedance (20Hz-20kHz)	2.4-2.8ohm (Balanced)
Freq. response (20Hz-20kHz/100kHz)	+0.0dB to -0.01dB / -0.04dB
Input sensitivity (re. 0dBV)	542mV (Balanced)
A-wtd S/N ratio (re. 0dBV)	86.5dB
Distortion (20Hz-20kHz re. 0dBV)	0.0006-0.0014%
Power consumption	33W (32W standby)
Dimensions (WHD) / Weight (total)	432x349x432mm / 60kg