

D'Agostino Progression S350

Taking inspiration from the industrial design and key circuit features of D'Agostino's Momentum series, this second-gen Progression amplifier may upset its own applectart
 Review: **Ken Kessler Lab: Paul Miller**

It struck me, around halfway through the first track, that designer/CEO Dan D'Agostino was emulating the way supercar companies delineate their model ranges. Hey, I needed something to explain why the new Progression S350 Stereo power amplifier at £34,998 costs just over half that of the Momentum S250 MxV's £54,998, and yet it is over two times the size and rated at 100W more per channel: 350W vs 250W. Also, at 454x230x584mm (whd) against a Momentum's 318x133x546mm, the Progression S350 dwarfs the dearer unit. It was like the comedy *Twins*, with Schwarzenegger standing next to DeVito.

Here's the graduation, then, as I imagine it, between the Progression, Momentum and Relentless lines, to support the analogy. At the extreme cost-no-object/flagship level, you have the six-figures-plus Relentless amplifier [*HFN* Mar '20 & Mar '22], which is spiritually equal to, say, Ferrari's limited edition LaFerrari.

HIT THE ROAD

Next, the Momentum series corresponds to the default Ferrari GTs, in the middle of the price span. Lastly is the most affordable level, where the Progression range resides, and which runs parallel to a new phenomenon among supercar makers: these amplifiers are the D'Agostino equivalent of a luxury SUV.

Its Progression series [see PM's boxout, p71] ticks all the same boxes. It's 'entry-level', and the most practical to own, being the one that is the most sensible for day-to-day usage despite its bulk (no longer a concern once in place). I even think it might be cheaper to run than either Momentum or Relentless amplifiers, at least according to hourly readings of the smart meter in my listening room. I have weenie valve amps that suck up more juice.

RIGHT: Massive 2kVA toroidal transformer and 8x12,000µF/120V reservoir cans feed 24 pairs of ON Semiconductor power transistors mounted onto two solid alloy side plates [top and bottom], complete with cooling venturis

Moreover, the Progression S350 is somehow less fussy and apparently utterly bombproof. Declared PM in an e-mail, 'It's a belter that'll drive anything!' And he would know, as *HFN* is still the only lab to have power-tested the Relentless monoblocks.

MINIMALIST MONSTER AMP

I pondered the S350's seeming indestructibility, wondering how it would have fared with notorious amp-eaters like the late 1ohm Apogee Scintillas. Suffice it to say, my easier-to-drive Wilson Audio Sasha DAWs [*HFN* Mar '19] would take to the Progression S350, and vice versa, like gin to tonic. The rear panel [p73] tells you all you need to know about its user friendliness (two-person lift aside), and you will have it connected in about 90 seconds!

Minimalism rules the back: an IEC mains socket, XLR inputs and multi-way binding posts. Connectivity is balanced-only and, correct or not, many of us still regard

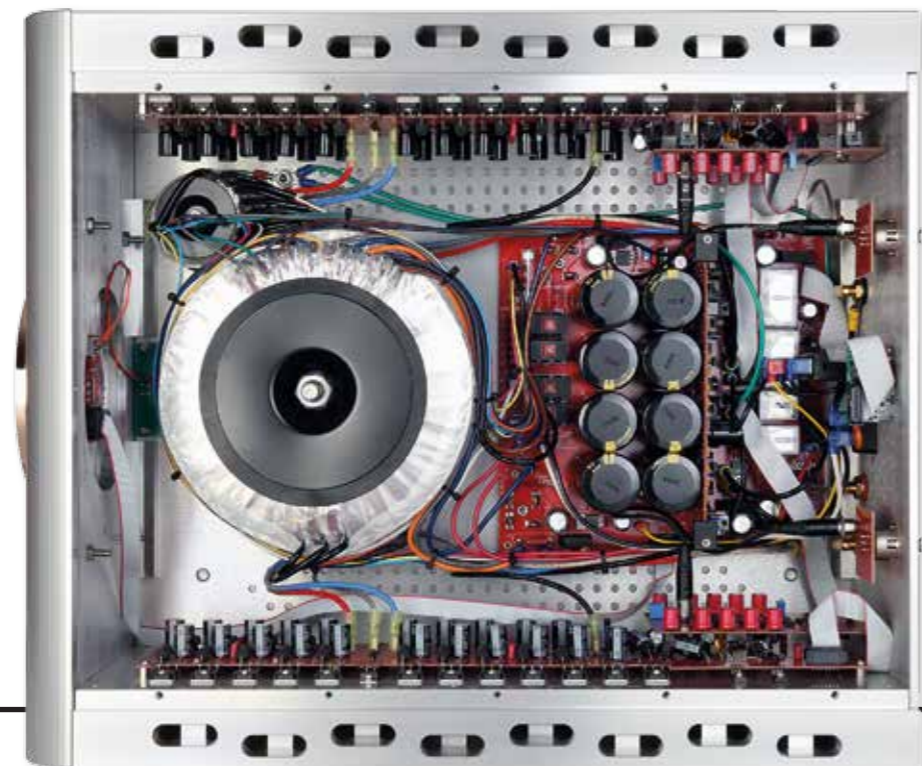
balanced operation as sounding superior to single-ended. Anyway, it's unlikely a partnering preamp, regardless of make, will lack balanced XLR outputs. Unless you're one who swears balanced cables only matter over 10m distances and audiophiles are fantasists, that debate is over.

Only two controls reside on the S350's rear. The larger rocker is for primary power

on, while a tiny toggle switches between two levels of dial illumination, or turning off the lighting completely. Alongside are sockets for 12V remote power-on triggers, and that's it. Dominating the front, meanwhile, is the brand's massive, signature, green-lit, Breguet watch-inspired meter with two pointers showing the left-and-right channels' output.

Run your finger underneath the bottom edge at the front, below the meter, and you'll find the hidden soft-touch switch to take the Progression S350 out of standby

'If this was 1970, I'd call it a "rock 'n' roll" amplifier'



mode. By the way, you will rarely see those needles flicker; I had to cover my ears and turn the system up to 'Stupid' to get them to budge even slightly.

THEORY OF EVOLUTION

There's nothing more to do except enjoy the Progression S350, and in my system it was up and running with the Wilson Audio Sasha DAWs in a trice. Regrettably, the amp arrived just as the DeVore O/93 speakers [*HFN* Mar '23] were being collected, although with hindsight it would surely have been overkill for the high-sensitivity O/93s, the amp barely ticking over.

More than a week with the Progression S350, alongside the latest-specification Momentum S250 with its MxV update, provided a revelation – it's a gift to authorised D'Agostino dealers as it can be used as a pitch some customers might find irresistible. Please keep in mind that I have lived with a Momentum stereo amplifier

for a decade, through two major revisions. And just as the MxV upgrade is a trickle-down bonus, so is the evolution of the Progression S350.

The manufacturer says both were beneficiaries of the Relentless amplifier's design and practice; each D'Agostino range has upped its performance to a higher level thanks to upgrades inspired by the flagship. In practice, then, the gap between a pre-MxV Momentum and the far dearer Relentless has been reduced by some measure, but more pertinent here is what this has done for the stereo and mono Progression amplifiers. As far as my ears tell me, the S350 is easily the equal of the previous, pre-MxV Momentum. That's another way of saying the amp has shot up in sonic merit to the level of an earlier Momentum costing £20,000 more.

As useful and crucial as such comparisons are, let's leave the Progression S350-vs-Momentum S250 MxV contrasts

ABOVE: The classic 'D'Agostino' chassis shape is retained, with alloy rather than the copper sidecheeks of the Momentum series. The huge, green-illuminated power meter is 'decorative'

by saying the S250 MxV has the edge, most vividly in an area that's enough to show how the two can co-exist – if this was 1970, I'd call the Progression S350 a 'rock 'n' roll' amplifier and the Momentum S250 MxV a 'jazz' or 'classical' amp, as was the accepted hi-fi shorthand back then.

Of course, that would be to perform a disservice, as both D'Agostino amplifiers are adept with any flavour of music. But what convinced me that the Progression S350 is a discernible level above its predecessors is its enhanced delicacy in the upper frequencies, without giving up any of the brutal take-no-prisoners power delivery of a Progression relative to a Momentum. To be sure, the costlier Momentum models are no slouches when it comes to sheer impact, but the way they deliver it is the other variant.

VIBES, BELLS AND BONGOS

Discussion of differences is about the small stuff, the subtleties, one's partnering equipment, and ultimately one's biases or preferences. This is as it should be, a challenge to the listener in the way that moving from a small hatchback to a 300kph supercar surely tests one's driving skills. To confirm this, instead of hard rock – a Progression forte – I was tempted by Martin Denny's *Exotica* [Liberty LT7034 open-reel tape], a potpourri of weird sounds recorded a lifetime ago, in 1956, to show off one's flashy new hi-fi system.

While primarily orchestral, Denny's album was rendered 'exotic' through the

PROGRESSIVE AMPLIFICATION

This second-generation series of Progression amplifiers benefits from more than a little trickle-down from the brand's quarter-tonne Relentless monoblocks [*HFN* Mar '20]. The high voltage 'Super Rail' input/driver stage stems from that flagship but, more importantly, so does the switch from Sanken to matched pairs of OnSemi bipolar output transistors. Both the S350 reviewed here and the partnering M550 monoblocks are built onto the same 'machined from a 22kg block' alloy heatsinks and host the same 2kVA Keen Ocean transformer feeding no fewer than 12 pairs of OnSemi power transistors per side. For the S350 each balanced 'side' is either the left or right channel [see inside pic, p70] while in the M550 one is a 'negative-going' and the other a 'positive-going' side of a bridged pair. Achieving very high power outputs into a moderate 8 or 4ohm – the M550 is rated at 550W/8ohm – is as much about delivering a high voltage across the load (>65V for ~550W/8ohm) as supplying the current to support it, which is why D'Agostino, along with Musical Fidelity, Hegel [p60] and others, opts for a balanced/bridged-mode configuration in its highest-power amplifiers. PM

D'AGOSTINO PROGRESSION S350



ABOVE: A pair of balanced XLR inputs are paired with gold-plated 4mm speaker cable binding posts. There's a power breaker next door to the flat-blade IEC mains inlet while, above, a tiny three-position toggle sets the meter's green illumination

use of myriad unusual instruments, including esoteric percussion, bongos, vibes, bells, bamboo sticks, small cymbals and other 'tropical' clichés which would horrify those who currently worry about cultural appropriation. This ensured that the activity at the frequency extremes was as revealing as any source material I could find – the opposite of an electric guitar staccato barrage à la Eddie Van Halen. And especially for the transient attack of ultra-delicate sounds, through the S350 it was fully on display.

SILK CUT

It was the same moving to the 101 Strings Orchestra's less-outré *A Night In The Tropics* [Audio Spectrum AST-102 open-reel tape]. This time, the upper frequency material was more familiar – with massed violins dominating – so the illustrative value was thus greater. The S350 boasted a recognisable absence of 'screech', and a silkiness that I would not have attributed to previous Progression designs. By comparison with its Momentum stablemate, again, the S350 proffered audibly greater weight to the lower-octave percussion and strings.

In the midband, the two amps were as close as a brace of genetically engineered twins: I moved on to the vocals of Los Machucambos' *Mucho Machucambos* [London Phase 4 Stereo LP74055 open-reel tape]. The unexpected extreme treble sweetness and subtlety throughout that I had heard before was retained with these Latin-flavoured performances, especially notable in 'Adios Irene', or 'Goodnight Irene' sung in Mexican. The percussion remained bold, in-the-room, all encompassing, like the massive – and I mean gigantic – soundstage.

In this regard the Progression S350 matched the Momentum S250 MxV to the inch, though the latter was slightly more open-sounding.

UNCANNILY AUTHENTIC

And the vocals? They were emerging with such lifelike authority that I could barely detect a gap, let alone a chasm between S350 and S250 MxV. A burst of Kris Kristofferson's country-folk *Jesus Was A Capricorn* collection on Super Audio CD [Vocalion 2CDLK 4635], and the gentle, thoughtful version of Bob Dylan's 'Make You Feel My Love' from *Fragments: Time Out Of Mind Sessions (1996-1997)* [Columbia 19439981992SC1], graced the listening room with a greater sense of air around the singers than I would have anticipated.

More to the point, both singers were displaying a presence approaching the uncannily authentic, their voices arriving as if from nowhere. The Progression S350 may be a powerhouse amplifier seemingly without limit, but equally, it has nearly all the grace of its stablemates. I am dazzled. ☺

HI-FI NEWS VERDICT

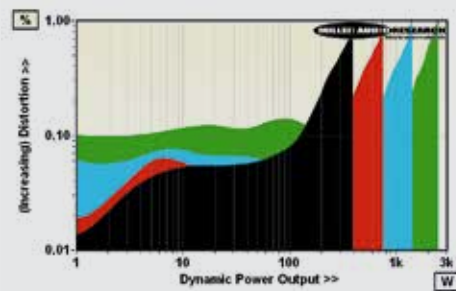
Since I've been using D'Agostino amps for over a decade, I reckon I'm fairly tuned-in to the brand's trademark sound. In this case, the Progression S350, like Dan, has mellowed a bit without sacrificing one iota of attitude, fierceness, confidence or presence. This amp has such command, regardless of source or system, that it demands more of the listener. Those who 'get it' will probably consider nothing else at the price.

Sound Quality: 89%

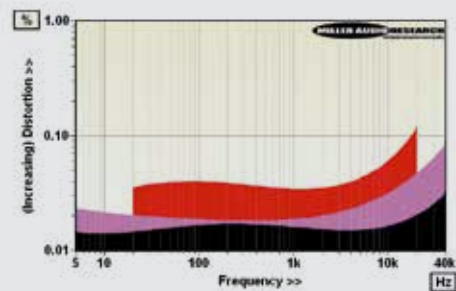


This second-gen Progression 'Stereo' shows worthwhile gains in performance, in all key areas, over the 'mk1' [HFN Apr '18]. The latter was rated at 3x300W/2x600W into 8/4ohm and achieved 2x325W and 2x575W with peaks of 365W, 690W, 1.33kW and 2.29kW into 8, 4, 2 and 1ohm loads under dynamic conditions at <1% THD. The latest S350 version is rated at 2x350W/2x700W into 8/4ohm and achieves 2x390W and 2x650W, respectively, with a boost to 395W, 760W, 1.44kW and 2.53kW into 8, 4, 2 and 1ohm loads under dynamic conditions [see Graph 1, below]. That's an increase of ~2.5A in maximum current, nudging the S350 over the 50A margin. Idle draw is higher too, from 113W to 137W here, suggesting a slightly richer bias, and while the overall gain is unchanged at +24dB, the S350 enjoys both lower noise and a wider 82.8dB A-wtd S/N ratio (re. 0dBW). The original Progression Stereo offered a lower 79.6dB but, as a rule, none of D'Agostino's power amps are designed with very low noise in mind (~85dB re. 0dBW is a target figure for today's amplifiers).

Nevertheless, the S350's refinement is further reflected in its lower distortion – again, not super-low by some standards but still low enough at 0.018-0.046% (20Hz-20kHz/10W) and impressively consistent with frequency at all power levels [see Graph 2, below]. Also very consistent with frequency, rather than especially low, is the S350's output impedance at ~0.17ohm (20Hz-20kHz) while the frequency response shows some slight 'sweetening' with a gentle drop to -0.65dB/20kHz out to -2.3dB/100kHz. The S350's subsonic bass is flat down to ~1Hz so you might care to engage the subsonic/warp filter on your phono stage if you are running a vinyl front-end! PM



ABOVE: Dynamic power output versus distortion into 8ohm (black trace), 4ohm (red), 2ohm (blue) and 1ohm (green) speaker loads. Max. current is 50.3A



ABOVE: Distortion vs. extended frequency (5Hz-40kHz; 1W/8ohm, black; 10W, pink & 20Hz-20kHz; 100W, red)

HI-FI NEWS SPECIFICATIONS

Power output (<1% THD, 8/4ohm)	390W / 650W
Dynamic power (<1% THD, 8/4/2/1ohm)	395W/760W/1.44kW/2.53kW
Output imp. (20Hz-20kHz/100kHz)	0.165-0.167ohm / 0.275ohm
Freq. response (20Hz-20kHz/100kHz)	+0.0dB to -0.65dB/-2.3dB
Input sensitivity (for 0dBW/350W)	179mV / 3400mV (balanced)
A-wtd S/N ratio (0dBW/350W)	82.8dB / 108.2dB
Distortion (20Hz-20kHz, 10W/8ohm)	0.018-0.046%
Power consumption (Idle/rated o/p)	137W / 1.25kW (2W standby)
Dimensions (WHD) / Weight	454x230x584mm / 57kg