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CONSTELLATION PERSEUS

NORMA REVO DS-1

SIMPLE AUDIO ROOMPLAYER+

VITUS SCD-025

HRT: HIGH-END SOUND WITHOUT THE HIGH PRICE



EQUIPMENT REVIEW

Constellation Audio Perseus phono preamplifier by Alan Sircon

t would be easy to say Constellation Audio hit the ground running, but I don't think this is a brand that has any connection with the ground. It's out there somewhere in hyperspace. The brand is still in its infancy by audio standards, but has already created powerful reputation for its 'good', 'better', and 'best' series of components, where even the 'good' models can take on the 'best' of other brands, and win.

The Perseus is a fine example of how outstanding these products can be. This phono preamplifier is from the company's 'better' Performance Series, and is based upon the Orion phono preamplifier from Constellation Audio's best Reference Series. Aside from the Performance Series cabinet, one of the main differences between Perseus and Orion was the use of very high performance (but now sadly discontinued) FETs in the top product. In sound quality terms however, the Perseus gets so close to the Orion that there is currently no Orion in the Constellation Audio firmament.

Then, there's the oft-touted 'Dream Team' approach. Core to the Constellation Audio ethos is the use of the best, whether that is a FET or the designer who incorporates that FET. And when it comes to phono preamplification, there are few people better qualified than John Curl. If you are the kind of person who might think up a fantasy list of legendary phono stages, it will include a Curl design. Not 'might', not 'probably'... will. Products like the Vendetta Research SCP-2 that people still talk of in reverent and respectful tones more than a quarter of a century later. He's that kind of phono amp designer. Common to Curl's best-loved designs, the Perseus is a fully balanced, dual mono phono stage with passive HF and active LF RIAA equalisation. Factor in the elegant industrial design of Alex Rasmussen for

all the Constellation Audio products, and the engineering smarts (and crazy hair) of Peter Madnick as project manager par excellence and the Perseus would have to try hard to not be a top-class phono preamplifier.

As with Constellation's preamplifier, the Perseus is a two-box design with the main circuit floating on an elastomer suspension. The smaller of the two boxes houses the power supply, and three small cables connect analogue left and right, and the control circuitry feed. The shape of the two boxes lends itself to placing the Perseus on top of its own power supply, but in an ideal world, these should be more separated. I am coming round to the logic of Naim owners dividing their equipment into a 'brains' rack (the sensitive electronics of the phono stage, preamp, streamer, what have you) and an adjacent 'brawn' rack of power supplies whenever this is possible. In so doing, however, note that you can end up with stacks of transformers (R-Core in the Perseus) working in sympathy, so there might need to be some fine-tuning of the



brawn stack. The influence of power supply on the phono stage electronics is 'subtle' (I couldn't detect anything in my system, but Peter Madnick did recommend this layout in the context of an über high-resolution all-Constellation system, and I have no reason to suspect anything other than this being predicated on some serious listening tests).

We've rattled on about the finish of Constellation Audio products before, but with good reason worth (briefly) reiterating. The quality of the product is without parallel, at least in the audio world. There's an almost irresistible urge to run your fingers across the product, so tactile is its design and the execution of that design. Aluminium made so fine and well that you think it marble. No photograph does it justice, because the finish looks a little flat in print. In the flesh, you just get it the first time you get near it – this is built for the connoisseur, the aficionado, the appreciator of all things uncompromising.

The truly dual-mono Perseus features four MC inputs and two MM inputs. Sort of. These are supplied in either balanced XLR or single-ended RCA connections, and on both the MM and MC blocks, it's impossible to use both at the same time. You could, in theory, connect a balanced XLR turntable for MC and a RCA-connected turntable for MM as these utilise different pathways for the Perseus, but Constellation Audio recommends using XLR where possible. The choice of input is controlled from the front panel; the uncommon touch-screen display common to Constellation Audio. There are both XLR and RCA outputs, and as a mark of how thorough the brand is here, there are separate grounding sockets for chassis and signal ground. The logical way of doing this is to ground the turntable to the chassis ground and the tonearm wire to signal ground. However, you should experiment.

The big feather in the Perseus' cap is its flexibility in cartridge matching, for both MM and MC. MM is adjusted by two fourway DIP switch boxes on the rear panel, the first two switches allow up to 200pF of

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capacitive loading, while the rear two adjust resistive loading between 10kΩ, $33k\Omega$, $47k\Omega$, and $100k\Omega$. Most phono stages just have 'MM'! MC is more complex: set the gain to 'high' or 'low' using the front panel, then adjust load from the rear potentiometers to anywhere from 0-1,000 Ω (although strictly speaking, that's 1-1,000Ω, because a zero-ohm MC load is effectively 'mute'). Here's a tip; use the cartridge maker's definition as a ball-park figure, then fine tune to get the best possible sound. You can get carried away with this; the difference between a loading of 300Ω and 301Ω is insignificant, and the best way to work this is an adjust-listen-adjust process that should take days. Fortunately, the front panel display shows the actual loading figure, because the likelihood of overshoot as you fine-tune is high. Also, don't be surprised if your cartridge loading sounds best with one channel slightly higher than the other, although if your cartridge demands 10Ω on the left channel and 999Ω on the right, something's amiss somewhere. There is also a high and low EQ adjustment for the passive RIAA equalisation, which provides $\pm 2dB$ (in 1dB steps) modification of the EQ curve at 10kHz and 50Hz respectively. Once again this is for very fine tuning, to match your system.

Naturally you won't be even thinking of Perseus unless you have the sort of turntable, arm, and cartridge combination that gives absolutely no quarter. Your LP system isn't just plucked from the top end of the price lists, either; it's the product of a lot of careful listening and matching. The rest of your system will be similarly carefully constructed. It's probably not one of those bright and forward sounding systems. And as a consequence, this might not be your first Constellation Audio product, and if it is, it will likely not be your last. That uncompromising approach will apply universally, at least universally through the audio chain. Nothing is left to chance. Similarly, your LP collection isn't likely to be 30 pristine albums of steam-train sounds, or a few dozen scratched Bert Kaempfert albums from the local charity store; it's going to be hundreds upon hundreds of well-maintained, cleaned, and desirable LPs. This potentially highlight's the nearest thing to diminishing the light of Perseus; it is RIAA only. If you want to question whether that early pressing of Miles Davis or Bob Dylan sounds best through RIAA or Columbia, look elsewhere.

EQUIPMENT REVIEW / CONSTELLATION AUDIO PERSEUS PHONO PREAMPLIFIER

Turntable equipment seems to divide evenly between those where the installation process is lengthy, but when completed the listener never feels the need to adjust anything, and 'twitchier' products that might be quicker to install, but demand attention on an almost per disc level. There's nothing intrinsically wrong with either (it's the difference between considering VTA as 'fit and forget' or as 'fine tuning for the LP'), but I tend to favour the 'fit and forget'. The Perseus is a fine example of that kind of thinking; the near infinite adjustment of MC cartridge loading is going to make installation longer than simply hooking up a generic 'MC' phono stage, but when the loading works just right, leave it well alone until you change cartridges. Conceptually, that pushes my buttons more than being faced with a series of adjustments on a per-record basis. If you are of the same mindset, the Constellation Audio Perseus represents the high ground of phono reproduction.

So, how does that high ground sound? Pretty damn awesome. In most high-end electronics, there seems to be a trade-off between detail and tone; you can have an incredibly high-resolution system, or you can have one that paints music in rich tonal shades, but it typically seems you can't have both at the same level. The Perseus is the exception. It does tone. It gives the music played through it a sense of harmonic structure and integrity that you normally get from good valve phono stages, but typically comes at the expense of the last scintilla of resolution and precision of image. It does detail. Put on a record you know so well that you could recognise it from the lead-in groove. You are hearing things buried deep in the groove that you didn't think possible. But most of all, you get the two combined and balanced perfectly.

This came in an epiphany moment when playing an old Decca SXL of *The Pirates of Penzance* by the D'Oyly Carte Opera Company from the late 1950s.

I thought I knew everything there was to know about that recording, from the creaking of the boards to the way voices change as the chorus turns to and away from 'the audience' (they followed stage directions on the LP, how crazy is that?). But this just gave more: more insight into the recording process itself, more insight into what was on the record, but also more insight into the way the music moves the listener, the sense of flow from theme to theme, just the sheer sense of fun that should run like a red thread through a G&S operetta. All that remained intact. This didn't just apply to the one record; it happened to everything. This was at once a revelation and a homecoming; it made those albums sound as they did when I first heard them and the voyage of discovery that brought, coupled with all the precision and detail and dynamic range we've come to expect from true high-end electronics. I could provide a list of performance traits that a good phono preamplifier is expected to reach, but this would reduce the review to a series of nods. It does all you ask of a phono stage, and then more.



EQUIPMENT REVIEW / CONSTELLATION AUDIO PERSEUS PHONO PREAMPLIFIER

Part of that 'more' is a complete freedom from overhang. This is something that is impossible to explain without direct personal experience, but what sets the Perseus apart from the crowd is an ability to sound so natural that it seems like everything else has a very slight reverb in place. There's no leading or trailing edge to music that isn't

on the record being picked up by the cartridge. To most that sounds like what a phono equaliser is supposed to do, but it's only when hearing the difference between 'supposed to do' and what the Perseus actually 'does' that you realise just how this phono preamplifier really performs.

Perseus is ultimately musically unflappable, and if it were a book, it would be un-put-downable. Tonally, it's a perfect match with other Constellation Audio equipment; not the pinched and pushed forward presentation so common today, possibly rich and dark (like fine chocolate), but in a way that makes you think its presentation is fundamentally right. That 'rightness' crosses genres and is entirely system independent, although if you are used to a sound that screams detail and detail alone, the Perseus will highlight some of the limitations to that balance, which might make you take a fairly radical about-face.

Half way through the review, a thought struck me about the Constellation Audio Perseus, the people behind the Constellation Audio Perseus, and the people who will buy the Constellation Audio Perseus. That thought was, 'second best is for other people.' There will be some who read that and think it the absolute height of arrogance. They will probably also be the kind of people who will burst a blood vessel or two at the very thought of a phono stage costing £27,500. But the fact is for some, second best IS for other people, and that price tag is something to shoot for rather than something to shoot at. Ultimately, if you dismiss second best as someone else's lifestyle, that road leads inexorably to a Constellation Audio Perseus phono preamplifier. •

TECHNICAL SPECIFICATIONS

Type: Two-piece, solid-state, MM/MC phono stage

Phono inputs: Three pair single-ended (via RCA jacks), three pair balanced (via XLR connectors) for MC; one pair single-ended (via RCA jacks), one pair balanced (via XLR connectors) for MM.

Analogue outputs: One pair single-ended (via RCA jacks), one pair balanced (via XLR).

Input Sensitivity: 0.2 -5mV (adjustable). Input impedance: 0-1,000 Ω (MC), $10k\Omega$ -100 $k\Omega$ (MM)

Input capacitance: 100pF-400pF

(selectable)

Output impedance: <50 Ohms (balanced and unbalanced)
Gain: 65dB max (balanced and unbalanced)

RIAA linearity: +/- 0.1dB, 20Hz – 20kHz Distortion: < 0.005% THD+N, 10Hz-20kHz Output noise: -100dB re 2V output

20Hz-20kHz

Dimensions (HxWxD): Phono stage preamp: 140 x 432 x 400mm; Power supply unit (PSU): 127 x 152 x 368mm

Weight: 26kg Price: £27,500

Manufacturer: Constellation Audio URL: www.constellationaudio.com

UK Distributor: Absolute Sounds URL: www.absolutesounds.com Tel: +44(0)20 8371 3909

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