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Constellation Audio Inspiration Preamp 1.0 and Mono 1.0 amplifiers

by Alan Sircom

The march of progress in high-end audio often seems to be centred on the price of the product. As things get better, so prices get ever higher. It rarely goes in the other direction. But Constellation Audio is one of the rare exceptions to the rule. Starting with its top end Reference range, then came the Performance series that saw the price of admission come down, and now Inspiration offers Constellation Audio performance at a new level. I hesitate to say 'low' level, because there is nothing about Constellation Audio's brands that could be considered 'low level', unless you are talking about resolution or bass response.

Relatively speaking, then, Constellation Audio brings the brand to a new level. The company is never going to make amplifiers that would be considered 'cheap'. But we are talking the difference between a First Class air ticket, flying in a private jet, and owning your own airline. When you think how close Inspiration gets to Performance and Reference in terms of sound and build quality, and how much more Performance and Reference cost in outright terms, it's hard not to be a little impressed.

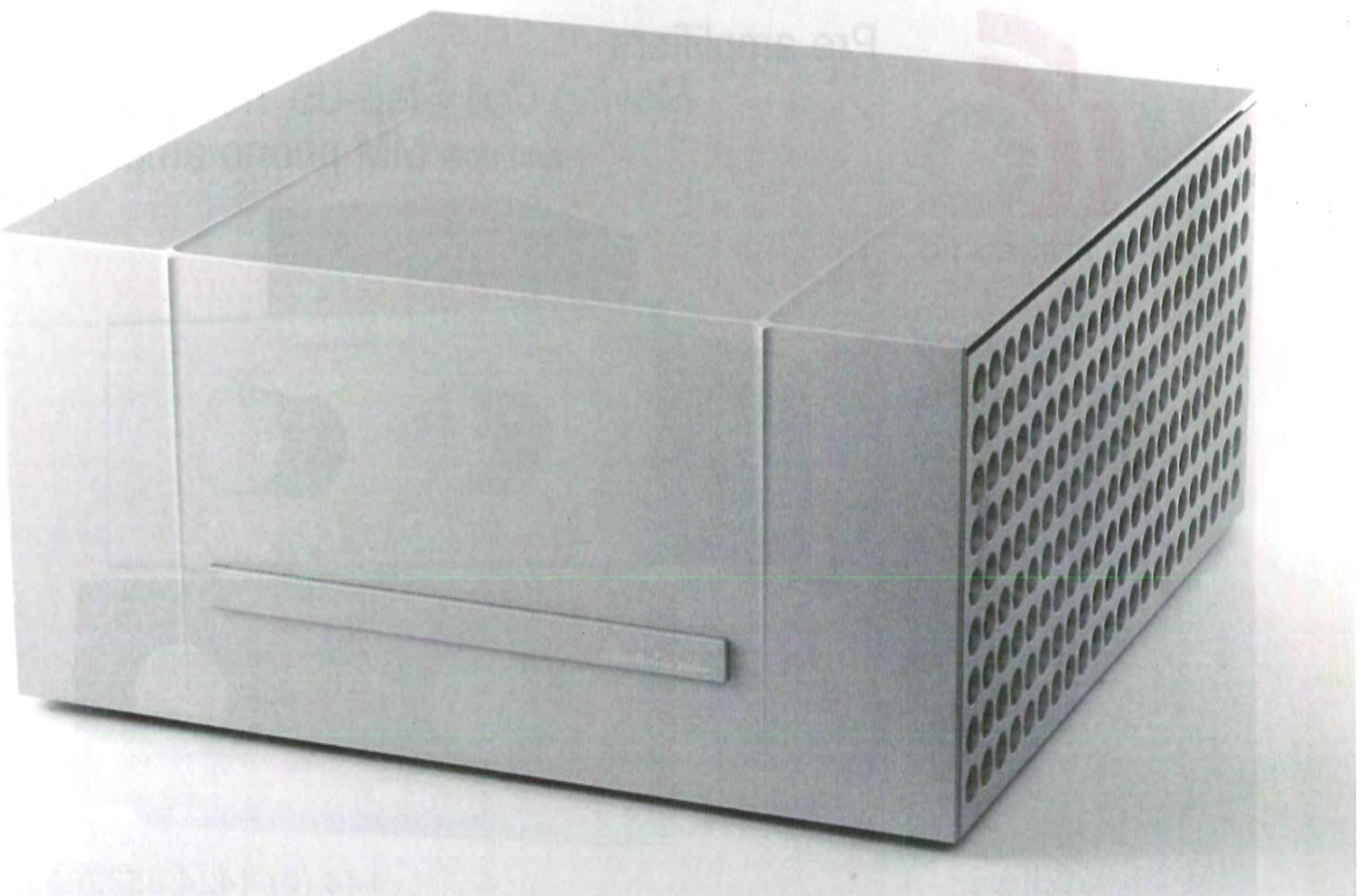
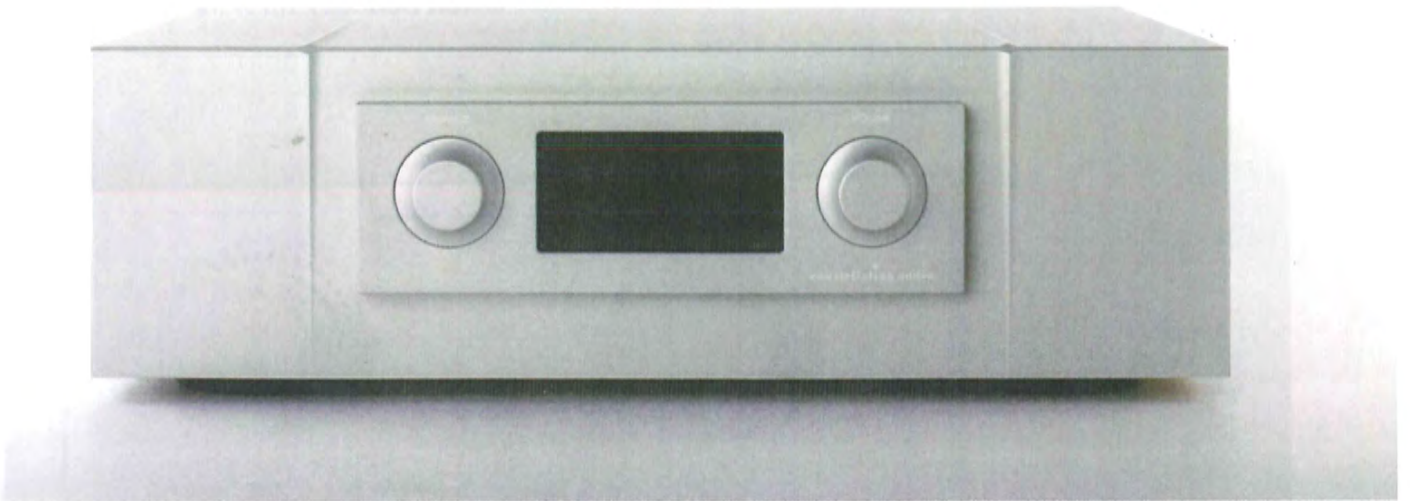
The big thing with Inspiration is it has many of the attributes of the bigger electronics, benefiting from the circuits pulled together from the company's famed 'dream team' of designers. So the Preamp 1.0 could be thought of as pulling together key elements of the Altair II and Virgo III preamps from the brand, and the Stereo 1.0 and Mono 1.0 pull in concepts developed for the Hercules II and Centaur II power amps. That is easy to write and incredibly difficult to do in reality. For example, cramming in the dual-mono, three-transformer preamp that routinely takes up two huge boxes in a single chassis is no mean feat, all this while managing to make it look very similar to the Altair II preamp by using CNC-machined aluminium, but this time with a tongue-and-groove design in place of the 'machined from solid billet' nature of its bigger brothers. You'd never notice this tongue-and-groove finish from the feel of the amplifier, so solid is the construction. And, like its bigger brothers, audio circuits are isolated, although not using the same 'raft' design. It's an intrinsically balanced design, although it features three RCA single-ended inputs and two RCA outputs. If you can, XLR is the way forward.

The power amps are equally drawn from Constellation's master plans for the Hercules II and Centaur II. It retains the same Line Stage Gain Modules found in its bigger brothers, and relies on making balanced amps with only N-type output transistors, instead of mirrored N-type and P-type transistors. The difference is using N-types only allows the circuit to perfectly balance,

which is otherwise impossible. The difference in output between banks of NPN and PNP transistors is minute in absolute terms, but it's this kind of trifle that makes perfection. Just ask Michaelangelo.

The principle difference between the Stereo 1.0 and Mono 1.0 and the Performance or Reference models is the input and gain stages are no longer mounted on individual circuit boards, but are fed separately. Placing these modules on one board means a considerably simpler power supply, meaning a smaller and less heavy chassis. The net result is the 200W per channel Stereo 1.0 and 400W Mono 1.0 we tested are not made up of smaller 125W modules (although the basic topology is very similar), and the amplifier only has 'sensational' dynamics instead of the 'revolutionary' dynamic range of the bigger brothers. This is not an idle claim; the NPN-only output design makes for greater dynamic range not unlike a single-ended triode amplifier, only with a lot more power behind it. This is what has made Constellation Audio so popular with today's top-end audiophiles. Inspiration follows in these footsteps.

If anything, Inspiration faces a tougher challenge than Reference and Performance because it is in the 'achievable' sweet-spot of upper tier professionals. To senior doctors, lawyers, and dentists with significant amounts of disposable income, no mortgage, and kids out of college, the cost of Inspiration models isn't unattainable today. And, unlike the more upscale products in the Constellation line, your amplifier probably doesn't cost as

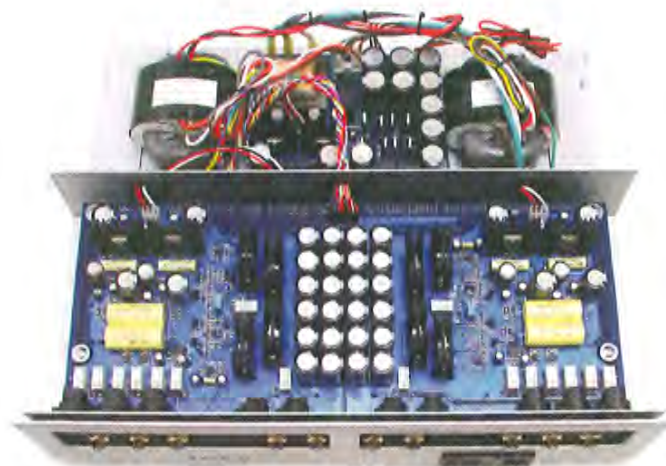


▶ much as the car in your driveway. This means there is a lot of well-established competition to take on, and the buyers are arguably more thoroughly aware of what that competition does. In a way, the Inspiration buyer might even be more careful with their purchases, because although this amplifier system is 'attainable' it is not an 'impulse' buy.

There's a common trope surrounding Constellation Audio that still applies here – 'valve-like sweetness and openness', with people even going so far as likening the sound to a single-ended triode amplifier, only with a lot more power. It's not the best way to describe the sound of Constellation because using one amplifier to describe another is always prone to failure, and the whole 'single-ended triode' thing can erroneously point one at a sound that's too warm and rose-tinted. And yet, the Inspiration amps are warm sounding. At least by comparison to most solid-state amps. This is a warm sound in a musically-inviting manner, without the hyper-detailed top end (it makes many amps sound 'etched' by comparison, a criticism levelled at a lot of amps recently and claimed -with tongue only slightly in cheek – to be a function of amp designers producing amplifiers made for an enthusiast community with ageing ears).

Inspiration has also got that fabulous openness and natural harmonic structure of good tubes. People (erroneously, in my opinion) view the simplicity of the circuit, the lack of global feedback, and the use of one honking great power tube per channel as the reason why SET amps sound so attractive. Personally, I think it comes down to our love of even-order harmonics doing to the sound what good lighting, slightly soft focus, and a lot of Max Factor can do to someone in a photograph. There is nothing wrong with this (OK, so eHarmony romance seekers might disagree), but it's not the ultimate in visual (or tonal) accuracy.

Where the Constellation Audio Inspiration models do so well is they manage to achieve the almost-impossible; the grace,



clarity, and open mid-band of a small single-ended tube amp (or possibly a low-power Class A design) with the precision and power of some major solid-state muscle. This is old news to those fortunate enough to be playing in Constellation Audio's normal price breaks – those who have heard what these amps are capable of are nodding along in agreement, here – but that Inspiration can bring this sublime sound to that more attainable level is heady stuff.

The other big feather in Constellation Audio's cap is imaging. Basically, whatever your loudspeakers can do in terms of throwing out a soundstage, the Inspirations will improve upon that. It will be deeper, wider, even higher than before. Not in an 'attack of the 50' singer' over-exaggerated soundstage, but just with better control and potential for space. A close-knit jazz club (Art Blakey's *A Night At Birdland Vol 1*, on Blue Note, for example) is small and almost claustrophobic, while a large concert hall, such as King Curtis playing 'Memphis Soul Stew' on the *Live at the Fillmore West* album [Rhino] is expansive, and you get a sense of real live musicians on a big stage. And there are a heck of a lot of musicians! This also showcases another of the Constellation Audio talents – dynamic range. This is a harder concept to get across than the usual 'it's got oodles of dynamic range', because the Inspiration is not in any way 'showy' with its dynamics. It just seems to dig deep and pull out a greater sense of the natural dynamics of the music than most. This last track really highlights this because it starts with a bass guitar and a hi-hat ticking away, and ends with a full funk band (complete with horn and percussion sections) going 'hammer and tongs'. This is also one of the places where the Performance and Reference show up the limits of the Inspiration series – if the Inspiration gets to 'uncanny' levels of dynamic realism, the Performance and Reference get to 'you are there!'. That being said, I would struggle to think of any product this side of Constellation's Performance that does a better job of dynamic range than the Inspiration models here. ▶

“Bringing better performance to more attainable prices is something Constellation Audio has been doing for a while.”

▶ Most importantly though, what really justifies the Constellation Audio Inspiration Preamp 1.0 and Mono 1.0 as staggeringly good audio is the way none of these individual elements actually matter. Yes, the amp as a package is phenomenally detailed, creates an extraordinary dynamic range, and throws out a soundstage every bit as good as the recording you are playing, but when you listen to a piece of music, it's all that counts, and the Inspiration models never once lose sight of that. For all their power, sophistication, technological appeal, and ability to 'scale' to the piece of music with near perfect accuracy, it's that ability to musically hang together that really sets the Constellation Audio models apart. I first said this of the Performance power amps, but it applies equally here: The Inspiration amps are like the best little amps in the world that brought along really big friends to help out.

There's an obvious question hanging over the Inspiration range... why pay more? Staying just with the Constellation Audio line-up thanks to that consistency, why would you pay about three times as much for a Performance model or eight times as much for a Reference model? On the surface, it's a tough question to answer. Yes, there's more power on tap, the components get ever closer to an ideal (even calling upon past glories to make the best devices for the task), and the complexity of those more upmarket chassis make for a more intrinsically 'right' product in look and feel. These aspects all add up to greater pride of ownership, and that also is reflected in the comparative exclusivity of those more up-scale products. But that's all 'surface' stuff. There is, of course, that dynamic range of the Performance and Reference power amps; the Inspiration gives you more than just a taste of that dynamic range, but it's not in the same 'leave you shaking' manner of the big models. Also, while there is a 'house' sound, the increased control, finesse, and space the more up-scale amps bring to the presentation restores order to the line-up; the Performance is better, the Reference better still. Constellation Audio has not cannibalised its own market for upper end products, because the opening bars of Beethoven's Fifth played through the Performance models will explain to you in seconds why that extra money is money well spent more than 10,000 words could ever achieve. Instead, what Inspiration has done is light a torch under the competition; these are products that play in the £50,000 league for £10,000 a piece. In fairness, bringing better performance to more attainable prices has been something Constellation Audio has been doing for a while, in that the Performance sounded more like the Reference models than they had any right to... and the Reference sounded like nothing heard in amps before.

The old saying of "99% perspiration, 1% inspiration" works here in an unexpected way. If I were an amp maker producing a rival in the same price point as this new Constellation Audio Inspiration duo, I'd be sweating too! These are profoundly good amplifiers that anyone seeking the best from their music must take into account. Very highly recommended! +

TECHNICAL SPECIFICATIONS

Preamp 1.0

Type: line stage preamplifier

Inputs: 3pr XLR, 3pr RCA, USB (for control)

Outputs: 2pr XLR, 2pr RCA, 12V trigger

THD+N: <0.001% 20Hz–20kHz @ 2V,

Frequency Response: 10Hz–100kHz,
±0.5dB

S/N ratio: >-105dB, A-weighted

Input impedance: 20kΩ (balanced),
10kΩ (unbalanced)

Dimensions (W×H×D): 43.2×13.3×38.1cm

Weight: 11.3kg

Price: £9,000

Mono 1.0

Type: Mono power amplifier

Inputs: 1× Constellation direct XLR,

1× standard balanced XLR,

1× unbalanced RCA

Output: Metal binding posts

Power output: 400W/8Ω, 800W/4Ω
(1kHz @ 0.2% THD+N)

Frequency Response: 10Hz–80kHz,
+0/-0.5dB

Gain: 14dB Constellation direct, 26dB
balanced and RCA

Output impedance: 0.1Ω

Input impedance: 20kΩ Constellation
direct, 10kΩ RCA, 20kΩ XLR
balanced

S/N ratio: >-95dB, A-weighted

Output noise: <70µV, 500kHz BW,
-116dB @ 250W

Dimensions (W×H×D):

43.2 × 21.6 × 48.3 cm

Weight per channel: 36.3kg

Price: £9,988 per channel

Manufactured by: Constellation Audio

URL: www.constellationaudio.com

Distributed in the UK by: Absolute
Sounds:

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