

Electronics Focus



Constellation Revelation Series Pictor Linestage, Andromeda Phonostage, and Taurus Monoblock Power Amplifier

Genuine Stars

Kirk Midtskog

Constellation Audio burst onto the high-end audio scene in 2010 with the highly acclaimed, ultra-expensive Altair linestage and Hercules mono amplifier (reviewed in Issue 215). The company followed up with the equally well-received but lower-priced Performance Series that leveraged trickle-down technology from the top Reference Series. The Altair and Hercules have since been updated (Issue 260) at even loftier prices, so Constellation continues to develop and refine its product lines in both price directions, mostly downward I hasten to add—the \$9900 Inspiration Preamp 1.0 being a good example. All of the Constellation models, from top to bottom, reviewed by TAS writers Robert Harley, Jonathan Valin, Alan Taffel, and Neil Gader, respectively, received glowing reviews.

I don't like to be predictable, but I am following suit here with praise for the newest Constellation models. Simply put, the Revelation Series Pictor preamp, Andromeda phonostage, and Taurus monoblock amps deliver every aspect of music playback so satisfactorily well that they represent a "just right" balance of performance attributes for me. Music comes to life through these Constellation electronics in a way that can be distilled into one word: buoyant. The Revelation stack seems to respond to music's ebb and flow, its dynamic rise and fall, its grandeur and subtlety in ways that evoke much of the immediacy and ebullience of live music. Mind you, the Revelation components are not the highest-performing electronics I've heard in every regard—Constellation's own next-step-up Performance Series being their most obvious superior. Marques like Soulution, CH Precision, T+A, Lamm, VTL, and ARC, to name just a few, also have wonderful offerings, but Constellation gear has a particular knack for combining very high levels of overall resolution and excellent

transient response with tonal density and textural complexity in a musically compelling, uh, constellation.

The Revelation Series occupies the number-three spot in the Constellation firmament behind the Reference and Performance lines and ahead of the Inspiration components. Priced at about \$18,000 per piece, the Revelations fill a previous price and performance void. As Irv Gross, VP of Sales, put it, "There was a large gap between the \$32,000 [Performance] Virgo III preamp and the \$9900 Inspiration Preamp 1.0. Similarly the price differential between the most basic [Performance] Centaur II Stereo amplifier (\$40,000) and the Inspiration Stereo 1.0 amplifier (\$11,000) was significant." Accordingly, the engineers at Constellation essentially combined the casework from the lower-cost Inspiration Series with many of the higher-level Performance Series' circuit niceties (such as external and more elaborate power supplies for

the linestage and phonostage preamps and more "Balanced Bridged" modules in the power amplifiers). The complete Revelation Series set, as reviewed here, is not exactly bargain-priced, but its sonic performance is stellar and its price competitive with other electronics in this category. (Please note: Although Constellation's corporate headquarters are located in Australia, all of its products are made in the U.S.A.)

Listening

The Revelation Series set produced a marvelously lithe and highly detailed sound in my system. Constellation's characteristic high levels of overall resolution coupled with excellent transient response and ample tonal density were very much in evidence, and those strengths were balanced in a thoroughly beguiling way. The usual trade-offs of accurate-but-analytical, silky-but-smeared, musical-but-veiled simply didn't apply here. It may sound too good to be

Electronics Focus

Constellation Revelation Series

true, but this Constellation gear just hits the sweet spot when it comes to bringing together the right measure of audiophile performance and musical expressiveness. The trio produced an expansive soundscape, detailed images, a high level of transparency to sources, tonal neutrality, wide dynamics and frequency extension...all with a winning musical swing. Once again, it may seem too good to be true, but I am leveling with you. This Constellation gear has an excellent balance of talents.

Components described as producing a “lithe and highly detailed sound” often carry the implication that they have a tendency to sound a bit lightweight at best and aggressive or even strident at worst—at least on some recordings. The Revelation trio managed to serve all sorts of music well with dynamic finesse and vivid details, without exacting a penalty in raggedness or edginess on any but the most obviously egregious recordings. It is perfectly understandable for skeptics to immediately suspect I am undermining a seemingly established truth: “Either the component in question is accurate and reveals the edginess in poor recordings or it is glossing the problem over in some way.” It must be either/or, right? Well, there is a happy trend in high-performance audio that is, to some extent, cutting through this Gordian knot. Really good gear is able to deliver very high levels of resolution while also allowing greater listening ease. I attribute this phenomenon to lower underlying noise levels and better dynamic control. High-quality audio gear seems to be able to track the jagged,

anharmonics of loud cymbal crashes, for example, or hotly recorded, high-pitched female voices, for another, with less noise riding along with the signal. If the audio gear contributes less electronic detritus to already tricky signals, the upper frequencies are much less harsh as well as more accurate. Even recordings with unnaturally emphasized cymbals or high-pitched female voices still sound more like cymbals and female voices do in real life. The Constellation stack revealed aggressive recordings for what they were, but not painfully so, and they allowed me to hear past many of the production flaws and thus appreciate the musicians’ and engineers’ presumed musical intent more easily. Some borderline-quality recordings were perfectly enjoyable through the Revelation set.

Well, there is a happy trend in high-performance audio that is, to some extent, cutting through this Gordian knot.

If dynamic response in an audio system is closer to real life, the listener doesn’t have to work as hard to compensate for inconsistencies. We are all familiar with the subtle, unconscious wince we feel when hard transients have an unstable, electronic brittleness rather than the instant-but-supple quality they have in real life. We humans apparently have great sensitivity to the timing of aural phenomena. It may have something to do with helping

us locate the source of sounds so we can get ready to flee or pursue something, as the situation demands. The Constellation trio reproduces timing and dynamics well enough to distinguish itself among the “really good gear.” One thrills to quick, clean transients rather than bracing for them. Even though it is more straightforward to attribute dynamic behavior to power amplifiers and speakers, upstream electronics also contribute a great deal to the low-noise, high-resolution, clean-transient response I’m carrying on about.

Pictor Linestage

The Pictor’s sonic contribution to the Revelation presentation included the same sort of detail-with-ease quality as the rest of the stack. The Pictor also had a large, open soundscape with very good depth layering. Soundstage height was notably higher than I am used to, and the back corners of the recording venue in well-recorded orchestral music were more distinct. Fine details, like the subtle emphasis mezzo-soprano Beth Clayton uses in her enunciation and dynamic shading on “When My Soul Touches Yours” on *Bernstein* [RR], emerged with wonderful facility. This rather moody song became more interesting and artful sounding through the Pictor compared to my admittedly much less costly and older Ayre Acoustics K-1xe. Tonal colors remained full and rich. Constellation’s own Performance Series Virgo III did everything the Pictor did at a higher level, especially depth layering and 3-D imaging. Tonal colors were also more fleshed out, and even more of a “peer into the soundstage” clarity emerged. The more expensive Virgo III linestage with its optional DC Filter unit (\$38,000) also had a more tube-like continuousness, and by direct comparison showed the Pictor left some of the finest details slightly less fleshed out.

The Pictor has six inputs, two fewer than the Virgo III, so some of the cost savings comes from a reduction in inputs. But the Pictor offers so much of what the Virgo III does for considerably less financial outlay that I believe it represents the better value. (Honestly though, if I had the means, I would spring for the Virgo III. It is better, plain and simple.)

On the nuts and bolts side, the Pictor has the same combination of controls and easy-to-use LCD touchscreen as other Constellation preamps. All aspects of the user interface are straightforward, and the variety and range of the adjustments covers everything I would ever need: standby, balance, phase polarity, mute, theater bypass, screen display time-out and brightness, individual input-relative volume offset, and of course volume and input selection. There are no tone controls. (I have never lived with a preamp with high-quality tone controls, so I didn’t miss them.) The screen menu navigation and selections are logically laid out. The metal remote control keeps things simple but useful with buttons for volume, balance, input, standby, and handy-to-have phase polarity. The downloaded manual is thorough and easy to follow. All Constellation preamps display the volume setting as an attenuation value: the lower the volume, the higher the numerical value. It’s an “engineering thing” and makes perfect sense, but it is the opposite of what I am used to. (A higher number means a higher volume, right?)

The 22-pound external power supply unit has two R-core transformers, one each for the right and left channel analog

Electronics Focus

Constellation Revelation Series

circuitry and one EI-type transformer for the control circuits. Accordingly, there are three separate umbilical cords to feed the R/L analog and control circuits. If you're including the optional DC Filter unit (and I recommend it), the same connections are made but with the DC Filter in between the power supply and the main unit. The separate power supplies in this dual-mono, fully balanced design allow for enhanced channel separation and noise reduction. Power demand in one channel does not ad-

versely affect the other, and Constellation's implementation of its Line Stage Gain Module—first developed for the ground-breaking Altair preamp—actively adjusts for any minute positive/negative signal imbalances and corrects them. The result is that any remaining difference between the positive and negative signals is noise, and more readily canceled out by the fully balanced circuits.

The optional DC Filter units (\$5000 each) for both the Pictor linestage and the Andromeda phonostage re-

duce underlying noise and allow for better dynamic range and control. Soundstage depth and the space around instruments and voices are better portrayed with the DC Filters installed. The differences are not obvious on all material but they contribute worthwhile improvements on the whole. I would add them later if I didn't want to pay for them upfront, but I definitely recommend them.

Taurus Mono Power Amplifier

The Taurus mono amplifier is a large, powerful beast...and it sounds wonderful: commanding, agile, transparent, extended, and neutral in its "just right" contribution to the trio's sonic package. A "big iron" amp at 120 pounds in a 17" by 8.5" by 23" chassis, it delivers 500 watts into eight ohms (doubling into four). While it doesn't run hot to the touch like the Performance Centaur II does, it requires some commitment on the part of the owner to allocate the space (and supply the strength) needed to deploy it. But I believe that many music lovers in the market for

Specs & Pricing

Pictor Linestage

Inputs: Three balanced, three unbalanced (USB input for control)

Outputs: Two balanced, two unbalanced, 12V trigger

Input impedance: 20k ohms balanced, 10k ohms unbalanced

Output impedance: <50 ohms

Dimensions: 17" x 5.25" x 15" (main), 17" x 2.75" x 14.5" (power supply), 17" x 2.75" x 14.5" (DC Filter)

Weight: 45 lbs. (main), 22 lbs. (power supply), 22 lbs. (DC Filter)

Price: \$18,000 (optional DC Filter \$5000)

Andromeda Phonostage

Gain: 65dB max (balanced & unbalanced)

Cartridge loading: MC inputs 5–1000 ohms, mm inputs 10–47k ohms, 0, 100 or 200pF

Inputs: Two balanced, two unbalanced

Type of outputs: One balanced, one unbalanced

Dimensions: 17" x 5.25"

x 15" (main), 17" x 2.75" x 14.5" (power supply), 17" x 2.75" x 14.5" (DC Filter)

Weight: 45 lbs. (main), 22 lbs. (power supply), 22 lbs. (DC Filter)

Price: \$18,000 (optional DC Filter \$5000)

Taurus Monoblock Power Amplifier

Power output: 500Wpc into 8 ohms, 1000Wpc into 4 ohms (1kHz, 0.05% THD)

Inputs: Balanced, Constellation Direct (balanced), unbalanced

Input impedance: 20k ohms (balanced, Constellation Direct), 10k ohms (unbalanced)

Output impedance: 0.05 ohms

Gain: 14dB unbalanced and balanced Constellation Direct, 32dB normal balanced

Weight: 120 lbs. each

Dimensions: 17" x 8.5" x 23"

Price: \$39,000/pr.

CONSTELLATION AUDIO

Corporate Headquarters

Suite 1, Level 6
580 St. Kilda Road
Melbourne, Vic 3004
Australia Factory
Factory
3533 Old Conejo Road, Suite 107
Newberry Park, CA 91320
constellationaudio.com
sales@constellationaudio.com

ASSOCIATED EQUIPMENT

Analog source: Basis Debut V turntable and Vector 4 tonearm, Benz-Micro LP-S MR cartridge

Digital sources: Hegel Mohican CDP, HP Envy 15t running JRiver MC-20, Hegel HD30 DAC

Phonostage: Moon by Simaudio 610LP

Linestages: Ayre K-1xe, Hegel P30, Constellation Audio Virgo III

Integrated amplifier: Hegel H360

Power amplifiers: Gamut M250i, Hegel H30

Speakers: YG Acoustics Sonja 2.2, Dynaudio Confidence C1 Signature

Cables: Shunyata Sigma signal cables, Nordost Heimdall 2 USB, Shunyata Alpha S/PDIF and AES/EBU, Shunyata Sigma NR power cords

A/C Power: Two 20-amp dedicated lines, Shunyata SR-Z1 receptacles, Shunyata Triton v3, and Typhon power conditioners

Accessories: PrimeAcoustic Z-foam panels and DIY panels, Stillpoints Ultra SS

Electronics Focus Constellation Revelation Series

amplifiers such as the Taurus will be won over by its uncanny wideband resolution, dynamic stability, soundstaging, and free-flowing musicality.

Whether I paired the amp with the Pictor, Virgo III, or my Ayre preamp, the Taurus retained its stunning transparency, extension, and dynamic snap. Music emerged in a vivid, evocative, Technicolor presentation that never sounded stilted or wore poorly over the long term. The Taurus made its contribution to the Revelation trio's excellent soundstaging by expanding the stage in all directions and lending even more solidity to individual images within the soundscape. My \$26,000 Gamut M250i mono amplifiers kept up with the Taurus surprisingly well across the board, but the Taurus rendered a more expansive soundstage, particularly in height. The whole front third of my listening room was filled with a detailed soundfield on the Saint-Saëns *Organ Symphony* [Stern/Kansas City, RR], for example. To its credit, the Gamut M250i amp sounded almost as powerful as the Taurus and had a more liquid, tube-like presentation. On the whole, though, the Taurus simply revealed more subtle details and sounded a hair more responsive to hard transients.

The Taurus is certainly the most powerful-sounding amp I have used, even though I have had other 500Wpc and even 600Wpc amplifiers in my system. The Taurus' grip and tunefulness in the bass, coupled with its fantastic dynamic control, just added to its appeal and provided an example, yet again, of how an amplifier's nominal wattage is only a starting point for as-

sessing how its power behavior will actually manifest itself. Bass notes on full orchestra and electronica took on commanding ease and fluidity and allowed me to relax into the music. I enjoyed the music all the more because I did not have to mentally compensate for a slight wobbling of control or brittleness when quick, bass-laden dynamic upswings kicked in. This is not a thin-sounding amplifier. Everything was underpinned by a solid foundation and tonal colors were given their full measure of expression. Again, "just right."

It may seem like an obvious observation, but the Taurus paired with either the Pictor or Virgo III was particularly felicitous. Of course preamps and power amps made by the same manufacturer should sound good together, but this is especially true with Constellation pairings. Constellation's preamps have a bit higher gain (26dB) than a lot of preamps and have such precision between the two phases of the balanced output signal that the preamp output can drive the amplifier's Constellation Direct input that bypasses the power amp's input stage. The typical buffering and assuring of perfect symmetry between the two phases of the balanced signal are simply not necessary when the amp is used with a Constellation preamp (in balanced mode). The sonic improvements yielded by using the Constellation Direct input are worthwhile. The soundscape opens up more, dynamic immediacy improves, and resolution becomes even finer. You have to turn up the volume to compensate for the bypassed initial gain stage, but I heard



Constellation Pictor linestage



Constellation Andromeda phonostage



Constellation Taurus stereo amplifier

only sonic improvements in this configuration—no downsides or compromises.

Amplifier operation was perfectly straightforward. There are two pairs of speaker binding posts to allow for two separate runs of speaker cables for bi-wiring. I like this because it alleviates the need to double up the speaker cables on the same amplifier binding posts if you use two complete pairs of speaker cables to bi-wire speakers. The Taurus requires a 20-amp (C-19) power cord, and the manual recommends using a dedicated 20-amp A/C circuit per amplifier because of the substantial current draw and, thus, power-delivery capability of each Taurus. Because I don't have enough 20-amp circuits available to comply with the recommendation, I used one 20-amp circuit for both monos and detected no signs of power limitation. Of course, I have no way of knowing how much more powerful the Taurus monos might have sounded in my system if I'd added one more 20-amp circuit.

The Taurus, like other Constellation amplifiers, uses the same Balanced Bridged amplification circuits found in the Reference Hercules II in a trickled-down implementation. They have identical 125-watt, single-ended modules used in a combined bridged implementation. According to Constellation, "this unusual arrangement achieves two important goals. First, it gives Taurus the same delicate, musical sound of a small, single-ended amp, but of course with far superior power and dynamics. Second, because these single-ended modules use only NPN output transistors, the positive and negative halves of the signal are treated exactly

Electronics Focus

Constellation Revelation Series

the same. In a conventional amplifier, NPN transistors power the positive half of the signal while PNP transistors power the negative half. This difference can obscure the details that for many audiophiles are the most important part of a stereo presentation." Technology aside, I can confirm the Taurus monos have a great deal of the delicacy and refinement one usually expects from a fine, medium-powered, solid-state Class A amp (or from a nice tube amp) coupled with the solidity and dynamic freedom of a very powerful transistor amp.

Andromeda Phonostage

Finally, we have the Andromeda phonostage, a two-box affair—three if you add the optional DC Filter—with the same look and feel as the Pictor linestage (*sans* knobs). It can accommodate up to four cartridges so long as they are two moving coils and two moving magnets (one each XLR and RCA). Output can be via XLR or RCA connections. Maximum gain is 65dB (balanced and unbalanced). You can select either a high-gain or a low-gain setting, but the low-gain output level is not specified. The manual instructs the user to simply choose the gain setting (for each input individually) that most closely matches the average output level of the other sources connected to the partnering linestage. Moving-coil cartridge impedance can be set from 5 ohms to 999 ohms in 1-ohm increments via a knob on the main unit's rear panel and is done separately by channel (because of the Andromeda's dual-mono topology). I think the 1-ohm steps in the loading adjustments offer users a welcomed

level of choice and precision. I certainly appreciated it. Moving-magnet settings allow for three capacitive and three resistive loading options. The LCD touchscreen and small buttons below it were easy to use if you follow the thorough and clearly written manual.

The Andromeda uses some of the same building blocks found in the Pictor linestage, including three separate power supplies in an outboard chassis. A separate optional DC Filter unit can also be used with the Andromeda. The trick, as with any phonostage, is to apply the RIAA equalization curve accurately and build in enough gain to increase the low-voltage cartridge output to line-level standard (about 2V in most consumer audio products), while also preserving signal integrity and keeping noise to a minimum. The Andromeda does a marvelous job of these things. I have heard plenty of mega-buck turntable rigs, and the Andromeda made mine sound much, much closer to those setups than I thought possible, even though my cartridge and turntable don't really qualify as top-drawer (see Associated Equipment below) in this era of stunning and very expensive state-of-the-art cartridge-to-phono-stage combos. The Andromeda proved itself to be a major contributor to the fabulously clear, open, impactful playback coming from my system. I have always favored analog sources, so the Andromeda really appealed to me on a personal level.

The Andromeda's sound followed the same highly resolving, dynamically alive, and expansive soundstaging

as the rest of the Revelation Series gear, so the only real instructive comments I can add about its sonic performance is in comparison to my usual phonostage, the fabulously overachieving Moon by Simaudio 610LP. At \$7500 it is a David to the Andromeda's Goliath in price, size, and number of chassis. With the optional DC Filter unit, the Andromeda's three chassis cost \$24,000 (\$19,000 without the filter); so, it is 3.2 times more expensive than the single-chassis Simaudio 610LP. Even so, the 610LP can play cartridge signals remarkably well. I was perfectly happy with it until I experienced the embarrassment of analog riches the Andromeda offered.

The level of transparency to the cartridge and, thus, the record grooves was at a different level of performance with the Andromeda. While the 610LP had a bit more bass heft and was highly musical and revealing of details, the Andromeda, not unexpectedly, had even greater resolution and threw a larger soundstage with greater 3-D depth layering. Notes started a bit sooner and continued a bit longer before they dissolved into the noise threshold. The sense of unfettered immediacy, the ability to instantly respond to signals, was greater with the Andromeda. On the Poulenc Concerto for Organ, Strings, and Tympani [Martinon/Orchestre National de l'O.R.T.F., Erato] more spatial information emerged, so the separation among instruments and the grandeur of the organ came through with a greater impact. Even electronic pop music had more texture through the Andromeda. The Odesza *In Return* album [Counter], for example, had subtle layers of complexity compared to the purely electronic sounds I had heard before. The Andromeda's self-noise was very low even though I used the high-gain setting with my Benz-Micro LP-S MR cartridge (0.34mV output).

Conclusion

The sheer sonic purity of the Revelation Series trio, especially in the upper frequencies where excessive noise would have been more readily apparent, allowed a wealth of details to come forth without the usual attendant grit or edge we so often hear with so-called "revealing" electronics. The result was high levels of fidelity to sources in a way that also served musical involvement.

With the Revelations, you don't have to compromise accuracy for musicality or vice versa. Could there be even higher resolution of fine detail, deeper textures, more saturated tone colors, a larger and more layered soundscape, and crisper transients? Yes, but moving up in Constellation's own line or going to another manufacturer to get better performance will cost more.

Constellation Audio has developed some very effective technology in the service of musical playback. Fewer inputs and trickle-down circuit implementation taken from the higher-level Performance Series, married with the chassis casework from the lower Inspiration Series, have made a substantial helping of Constellation's sonic magic available at more reasonable prices in the Revelation Series. The trio's form factor and weight are decidedly not in the sleek and chic set, and these components are not inexpensive. If you have the space and the means, however, I wholeheartedly recommend the Pictor, Andromeda, and Taurus. My audio life was certainly brightened by these stars. **tas**