

Bryston 4B³ (Cubed Series) Amplifier

A World-class Amplifier For an Attractive Price



George de Sa

Bryston Limited is a Canadian audio product manufacturer with a rich 40 year history. Today, Bryston produces a full range of hifi products, including digital audio players, DACs, surround sound processors, preamplifiers, amplifiers, phonostages, loudspeakers and now, even turntables. Bryston applies continuous improvement to its manufacturing but only formally updates models when implementing a new feature or performance enhancing design.

I'm well acquainted with Bryston products, having owned a 4B-ST amplifier,

a BP6 preamplifier and currently using a 4B-SST² as my reference amp. The 4B-SST² has been a true workhorse as well as a means of enjoyment; hence, when I heard that Bryston was introducing a successor, their new "Cubed Series", I immediately requested a 4B³ amplifier for evaluation. The 4B³ arrived at my door in late March and has seen continuous use ever since.

design features

The new Bryston Cubed Series amplifiers are an evolution of the company's

SST² design; however, rather than an evolutionary step, I'd call this one more of a leap. Why? From a technical perspective, all Cubed Series amplifiers incorporate a ground-breaking, never-before-seen input stage circuit design. This new 'Salomie' input stage, named after its designer, is so innovative that Bryston has obtained a patent on it. In fact, Bryston claims that the new *Salomie* input stage is more linear than anything the company has previously produced – an amazing achievement, given their historical prowess with linear amplification. Using twelve active devices



All Bryston amplifiers are available in a choice of silver or black finish, and with or without handles on the front panel.

in an array, the new input stage matches the amplifier to virtually any preamplifier and delivers the first 6 dB of gain. With a measurable distortion below 0.001%, it provides essentially perfect transparency. Along with this trailblazing input stage, the new Cubed Series has improved common mode noise rejection, and features a major improvement in EMI/RFI noise rejection that prevents unwanted interference from impacting the audio signal. In addition, for the energy conscious, standby power consumption has been significantly reduced, to less than 500 mW. The new Cubed series introduces some changes to the rear panel and also an updated aluminum faceplate. The new faceplate is now comprised of two pieces, rather than one (ignoring rack handles), with a cube-like central insert that allows the potential for future changes. At this time, Cubed Series updates have been implemented in all Bryston amplifiers, with the exception of the 6B and 9B models, which are expected soon.

The Bryston 4B³ is priced at \$5,695 and offers similar specifications to its 4B-SST² predecessor. Its power is conservatively rated at 300 watts-per-channel (wpc) into 8 Ohms or 500 wpc into 4 Ohms; and 900 wpc bridged mono into 8 Ohms. Harmonic distortion is rated at less than 0.05% (20Hz to 20kHz, at 300 watts);

and signal to noise ratio is -110dB (single ended) and -113dB (balanced). For complete specifications, please see www.bryston.com. Options include the choice of silver or black faceplate, in a 17" width (without handles) or 19" width (with handles). A rack mountable Pro Edition is available in black.

The 4B, has been Bryston's top-selling amplifier for many years, sitting mid-way in the series, in price and power output per channel. It was first introduced back in 1978 and has been through seven iterations since. The first two were simply called 4B, then came the 4B E, 4B NRB, followed by the 4B ST that was succeeded by the 4B SST and 4B SST² (a.k.a. Squared Series). The latest series, is the 4B³ (Cubed Series), which is the 8th generation, and it drops the ST initials of Stuart Taylor, who was attributed with the earlier designs.

From a fit and finish perspective, the 4B³ carries on the Bryston tradition of being built like a tank, weighing in at a hefty 63 lbs. In fact, at its price-point, I know no other amplifier that matches the 4B³ in its level of solidity. The front power button and the rear connectors are all top notch, well arranged and robust. The Cubed Series also sports a new bead blasted finish (in silver only), which gives the faceplate an almost suede-like feel and upscale appearance. My review sample

was a silver, 19" version with handles and optional blue LED running lights. Whether the aesthetic of the Cubed Series floats your boat or not there is no taking away from the quality of construction, and the legendary 20-year manufacturer parts-and-labour transferable warranty.

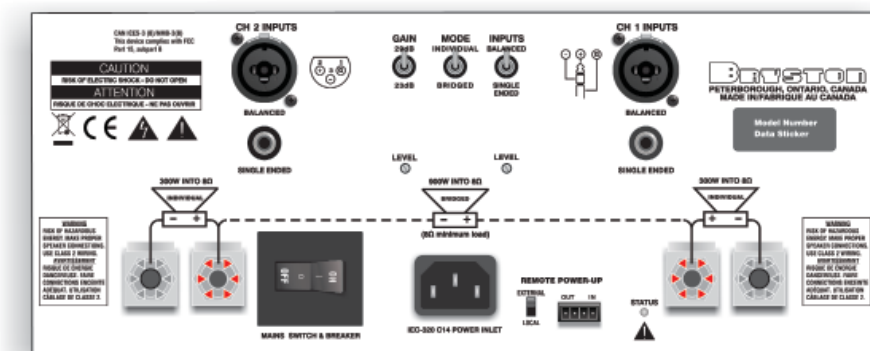
performance

I evaluated the 4B³ primarily with the Bryston BP26 preamplifier, though my resident Simaudio 350P preamplifier provided additional perspective. Source components were my Rega Apollo CD player and a Simaudio 280D DAC (with integrated digital music player), accessing music on my network and TIDAL HiFi. My analog source was a VPI Scout turntable, running through a Project Phonobox II SE phonostage. Cabling was all Nordost Heimdall 2, along with a QB8 power block. Loudspeakers were my quadral Aurum Montan VIII towers and my recently acquired Focal Electra 1008 Be 2.

I know that many owners of Bryston SST² amps are wondering how their performance compares to the new Cubed Series and let me assure you that the sonic difference between the two series is in no way trivial. Substituting the 4B-SST² with the 4B³ in my system, resulted in a very noticeable change in sound. Was

I surprised? Yes, given how different they sounded and knowing the similarity in their specifications. Some subscribe to the opinion that ‘two well-designed, low distortion, linear amplifiers, when operating within their power band, will sound the same’ – all I can say is they have obviously not yet heard the 4B-SST² versus 4B³.

Listening to the track “Soon as I Get Paid” from the Keb Mo album *Slow Down*, I took note of the wonderful natural richness and texture of the bass notes that delivered a tangible growl to the electric bass. The guitar too was impressively snappy and percussion was concussive and very dynamic. My attention was drawn to the cymbal strikes that possessed a natural shimmer without any harshness or abruptness. In contrast, the 4B-SST², though also able to deliver great dynamics, presented notes, most noticeably high-frequencies, with more leading-edge emphasis – more bite and less refinement. Notes with the 4B³ were fuller, presented more naturally, had greater tonal colour and harmonic complexity that increased sonic authenticity. Listening to the piano, playing to the right of the soundstage, it



This diagram shows the rear panel of the Bryston 4B³ amplifier.

was evident that the SST² came short on the depth that the 4B³ was able to convey. This was amazing because the 4B-SST² has been nothing less than impressive with depth and imaging. The 4B³ was clearly able to expand the envelope of the soundstage, allowing me to peer deeper and hear the outermost limits of the reproduced space more easily.

One of my beloved jazz recordings is the 1964 live recording of the Oscar Peterson Trio, the album *We Get Requests*. My favourite track, “You Look Good To

Me”, sounds very pure and incredibly lifelike when played on a capable system. Playing it off TIDAL, I was riveted by the sinewy drone of the double-bass bow across the strings. I’ve listened to this track many times before; yet, the 4B³ brought increased fullness, additional texture, richer tone and inherent musical detail, unlike anything I’ve experienced with my long-term reference, the 4B-SST². The woodiness of the instrument and the vibration of its panels was conveyed with tactile intensity, embodying the

instrument. Various elements within the soundstage now possessed a clearer sense of space, with greater delineation and separation, as well as significantly improved front-to-back layering. The high frequencies had an enhanced sense of purity and transparency; characterised by the bell chimes and cymbals in this recording. The 4B³ also gave Oscar's piano an unprecedented grandness, giving it realistic size and dimension within the soundstage. By contrast, the 4B-SST² delivered all the fundamental details and dynamics but produced flatter and smaller images with less tonal colour and harmonic complexity.

Moving to Patricia Barber's, "Ode to Billy Joe" with the 4B³, Patricia's finger snaps gained a new sense of realism. This track possess impressive detail and vivid dynamics but with the 4B³ there was more. Along with the quick and tight sound of the snaps was now a considerably greater appreciation of the smack of the finger against the palm. It's in such matters of completeness and harmonic rendering that the 4B³ shines. Not just detail but detail accompanied by shadings and overtones

that add to realism and the convincing illusion of a live event. Patricia's voice was also more alive, larger and rounder, with less sibilance. In addition, the 4B³ was more capable in distinguishing her direct voice from the reverb in the recording, separating the layers better, and revealing her direct voice closer and clearly separated from the reverb trailing behind.

With the high resolution version (24-bit / 192 kHz) of Shelby Lynne's title track from her *Just A Little Lovin'* album, the soundstage was larger than I've ever heard in my listening room, with the faintest of the echoes carving out the nether regions of the space. It was the brush strokes though that called out the sophistication of the 4B³. Here, where the 4B-SST² was able to render an impressive amount of clarity and detail, the 4B³ went considerably further by delivering increased delicacy and consistency, portraying a truer likeness of reality, and giving more insight into the subtleties of the movements. On the piano, the 4B³ demonstrated its proficiency with inner warmth and body, rendering the piano

with size, significantly better than the SST².

Bryston has always aimed at producing equipment that is faithful to the recording, however the 4B³ goes far beyond this by being faithful to the soul of the music. Yes, it's endowed with muscle; it is quick, dynamic, transparent, and has an iron grip of the frequency extremes but what makes the 4B³ most special is its finesse – able to conjure subtleties that engender realism. Its \$5,695 price is very competitive for a North American built high-end amplifier, especially given that it will easily compete with some of the world's best amplifiers. The Bryston 4B³ is a world-class amp – beg, steal or borrow – once you hear it, you won't be able to go home without it.

quickinfo

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www.bryston.com

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