

April / May 2009

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## SA Equipment

World Premiere

### Bryston 7B SST2 C-Series Monoblock Power Amplifiers

Redesigned and ready to go.

Review by Anthony Nicosia

Bryston audio products are backed by some of the best warranties in the business. Twenty years on all their analog circuits, meaning every amplifier and preamplifier they make. I find it highly unusually, and very refreshing, to find a twenty-year warranty on audio products. As for their digital gear like the processor and the external DAC they come with a five year warranty and three years for their CD player. To me this makes a pretty strong statement about the company's belief in the products they sell. Please check their website for complete details on all their warranties. In an effort to produce quality products rather than mass produced quantities, Bryston technicians are not pressured by quotas or schedules.



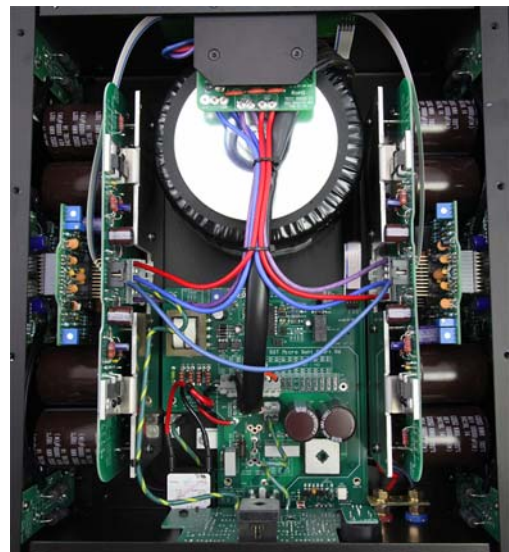
In fact they are offered flexible work hours and have the chance to share in the company's success. The goal being to carefully produce quality products with a low return rate in an effort to create higher customer satisfaction. According to their website the technicians take between thirty and thirty-five hours to assemble just one amplifier (or preamplifier) so as you can see they are not putting these out in traditional assembly line fashion. The website goes into more details about company philosophies, and being a graduate with a B.A. in Psychology, I must admit that I like many of their ideas with regards to the treatment of employees. After all it is the employees that have a direct impact on the overall product delivered to you the consumer. You can read more details concerning this at their website located under the tab labeled Company where you then will find the sub tab Philosophy.

### A Redesigned Product

Let us now however look to the product on hand for today's review. Until just recently Bryston made 7B SST amplifiers but has now switch to the designation Squared ( <sup>2</sup> ) to attach at the end after the "SST". So what is the difference between these new 7B SST<sup>2</sup> amplifiers and the original 7B SST's? Below is an impressive list stating these differences:

- New power supple transformer design
- New push on/off power switch
- New chassis design
- New Soft-Start circuit
- New Balanced input stage
- New Power Supply board
- Bridging mode performance improvement
- Reduced point to point wiring
- Reduced circuit board count
- Redesigned output chokes

Unfortunately I never did a formal review on the original 7B's, although I did almost purchase them. When I bought my Legacy Focus 20/20 speakers (weighing in at 180 lbs each) from my local dealer he told me to mate them with the Bryston 7B's. I did listen to that wonderful combination and the only thing holding me back at the time was that I was purchasing the Legacy speakers with Rosewood finish, which retailed for around \$7000, and needed to wait a little before approaching my wife with the idea that we also needed a new amplifier. I can be pretty convincing but my "old" amplifier was still less than only one year old and I did not think even I could pull that one off.



I was right, as she had never seen the size of the Legacy's until I unloaded them from the truck and brought them into our home, which caused quite a stir for the rest of the evening. In the back of my mind though I have always wanted to own a pair of Bryston amplifiers. When the opportunity came for me to review the new 7B SST<sup>2</sup> amplifiers I was like a kid the night before his birthday staying up late at night dreaming of playing with the presents he hoped to get the next day. Being that it was a long while ago and with different rooms and associated equipment I can not officially compare the two. However while the original 7B's sounding good enough that I wanted to purchase them, I do not remember being as impressed as I was with the newer version being reviewed today.

## Features And Benefits

When the amplifiers arrived they certainly were a sight to behold, two large boxes, very well packed, with one amplifier and one robust looking power cord in each. At first I was a little worried as one corner of one of the boxes had been damaged during shipping. When I opened it up though everything was perfect inside. When I contacted James Tanner the Vice President at Bryston to tell him that the amplifiers were fine he sent me an email saying, "Yes we do a drop test on the corner of the box with the product inside when we are developing packaging for any given product." I must admit I was quite impressed. Not only does this company take care in developing, assembling and testing your product but they exert that extra effort to make sure that it arrives safely to your house with packaging sturdy enough to withstand some non-audiophile handling. Starting with the back panel you will find a host of features. You definitely should read the instruction manual first which explains each one, before attempting to setup your amplifiers for the very first time. On the back panel there are both RCA and Balanced inputs as well as a switch to activate either one. Next to this is a switch that allows the user to decide between a 1v or 2v input sensitivity setting. This is basically a gain switch. The 1V setting provides a higher gain of -29dB (1V in + 100w @ 8 Ohms with noise at -110dB). The 2v setting provides a slightly less -23dB (2v in + 100w @ 8 Ohms with noise at -113dB). James Tanner from Bryston recommended that I leave it set to 1v with my particular speakers and I found that worked just fine as I did my review based on that setting.

The binding posts on the back have the ability to accept spade lugs, banana plugs or stripped bare wire. I found them to be an excellent set of posts working easily and making proper contact with the cables. If you order the pro model you also get a level control that can attenuate the input signal level from 0dB through -14dB, mine was not the pro model. On my C-Series there was a line voltage status indicator light on the back which should constantly light up green (if it is blinking green there is a problem) when the back power control switch is set to on. Unless you are switching wires or using the amplifier for the first time and are setting it up you should always leave this switch set to on and use the power switch on the front for the amplifier on/off functioning.



Looking further we next see an external control voltage power-up switch labeled local and auto. This along with the accompanying outlet is to be set to local for use with the front panel SST Power switch or external if an external source is required to power-up the amplifier. I left it set to local. Lastly the back panel features the obligatory (at least at this price range) IEC connector. Here I decided to first listen with the supplied factory power cord which being 12 gauge was quite robust and worked fairly well. I am however a believer in using after market power cords to coax the most from your components and feel that they can up the performance level enough to justify their existence as long as the price range is kept in perspective with the product on hand. Having numerous power cords available to me I was able to experiment, finally deciding on some Audience e power cords at \$674 each to use for the listening tests.

These power cords coupled with some Acoustic Revive XLR and RCA interconnects as well as their SPC-PA speaker cables comprised my review cable ensemble for the Bryston amplifiers. On the front panel (mine had the 19" rack mounted silver faceplate with handles versus the 17-inch faceplate without handles), is an LED light to indicate the various stages that monitor the following amplifier conditions.

- Unlit: Indicates the amplifier has no power
- Red: Indicates the amplifier is muted (power up)
- Green: Indicates the amplifier operation is normal
- Flashing Red: Indicates the amplifier clipping
- Orange: Indicates channel thermal shutdown

During my review period I never was able to drive the amplifier into clipping nor did the LED display ever turn anything but red for off and green for on. As hard as I ran the amplifiers they did not even get hot to the touch. Looking now to the bottom of the faceplate located below the LED light is a power on/off switch labeled "SST" which is how the amplifiers are turned on when the master circuit breaker power switch on the back is left on. Each amplifier weighs about fifty pounds which for me was quite easy to lift and move into place. Bryston amplifiers are all designed to be Mono in that each channel is separate with independent power supplies, sharing only chassis and power cord. Both my wife and I found the silver faceplate design version to be quite attractive in appearance which is always an added bonus. However, now came the crucial part of this evaluation, how did these impressive looking feature ridden amplifiers fit into the scheme of contributing to the improvement of the sound in my review system? To start out with, and for most of the review, I listened using the balanced outputs from amplifiers to preamplifier. My CD, though, did not have a balanced output and there I was forced to use unbalanced RCA cables.

## The Listening Sessions

The Rolling Stones are a good test of a product's effect on both soundstage and soundscape. I heard their *Big Hits (High Tide and Green Grass)*, the remastered [Abkco 90012] stereo hybrid SACD version. These amplifiers threw before me a large and deep picture of The Rolling Stones as they sang "(I Can't Get No) Satisfaction". The soundscape left to right spread out the bands performers in an impressive manner but what really caught my attention was the way the amplifiers handled the portrayal of the front to back depth of the band. On top of all this, which in itself was a very difficult task, I had the feeling of being at the recording studio listening as the band cut the track. Both vocals and guitars, in particular, sounded as close to a live presentation as you could expect a stereo to reproduce. There was silence surrounding individuals making each distinct and easily recognized as they played on the soundstage before me. Being a modular design with separate power supplies cross-talk is virtually non-existent as they produce a coherent sound within a wide soundstage. Now if you like The Rolling Stones, and I do, you should really enjoy hearing them played through these amplifiers. When set up with proper cables and associated equipment these amplifiers can sound phenomenal.

Moving along now to a CD I had long since abandoned, which was stored in a portion of my garage where old discs go to rest, I pulled out the original motion picture soundtrack to *Sleepless in Seattle* [EK 53764]. Now I will admit it, I loved this movie, so I bought the soundtrack. It really never did impress me all that much though when listening to it on my home rig. Not impressed that is until now. Let us start out with Louis Armstrong, the great Satchmo, singing "A Kiss to Build a Dream On" where the opening piano notes and drums seem to set the tone of the song as they seemed to flow smoothly out of my speakers to rest gently upon my ears. Shortly afterwards you hear Mr. Armstrong with his uniquely distinctive voice, while a trombone plays quietly and clearly in the background. After a little while he naturally chimed in with his magnificent trumpet playing. Now I always find that vocals and horns are easily recognizable as to whether they are having correct timbre or not and I found the 7B SST<sup>2</sup> amplifiers to do an excellent job of giving us a proper rendition of this performance.

Not to be outdone was Dr. John and Rickie Lee Jones with their interpretation of the song "Makin' Whoopee". Here the Bryston amplifiers created their magic once again on vocals as they gave me that intimate almost tube like sound. Now there was one thing I especially liked about these amplifiers, among a host of exceptional other qualities they possess, was their ability to sound incredible even at low volumes. Many tube amplifiers can do this but I find that some solid-state designs need that little extra volume boost to sound better. Not these amplifiers though as they mesmerized me even at lower sound volume levels. Do not get me wrong with 600-watts of power they could fill your house to levels that please even the most die-hard rockers. Fortunately you do not need to play them loud to enjoy their sonic attributes. This makes for great late night listening sessions, which in my family I am famous for, when you do not want to disturb those that are resting peacefully.

I am not a headphone type of guy, in fact my preamplifier does not have a headphone jack, so for me the way these amplifiers sounded at a lower volume was an important feature. When I mentioned this to James Tanner at Bryston he emailed me explaining that the point of the Squared design was that "the first watt has to sound as good as the last watt". One last note about this disc is when listening to "When I Fall In Love" with Celine Dion and Olive Griffin, a fantastic song by the way, I heard a strange voice that quickly started and stopped. Moments later I heard it again and looked up to notice my older son talking to me. Perhaps it was a combination of being enveloped by the song and the review process but the singers sounded so "real". It gave the illusion of them being in the room, with me and my son, making it hard to differentiate between the two (live versus recorded). This is definitely a powerful statement in favor of these amplifiers. Those of you who are fans of Celine Dion will love the way the power of the Brystons can take her voice to high sound levels that will truly impress. At the same time, within that same song, they never failed to create that intimate magic of Olive Griffin's voice as he sang his part of the duet at softer levels. This disc will now stay in my main library for at least as long as the 7B SST Squared amplifiers are in the house.

## XLR Versus RCA Cable Connections

Taking a break from my balanced cables it was time to switch over to using all RCA interconnects. Since both XLR and RCA cables can be used with these amplifiers and because not all of us have a balanced preamplifier I felt it imperative to listen with the RCA cables as well. Fortunately for me I had a Monarchy Audio preamplifier which has both XLR and RCA inputs allowing me to check its performance either way. Just a brief note on this, aside from the differences in balanced (which should be slightly quieter) versus unbalanced, the amplifiers did not disappoint me when heard through their RCA outputs. While I did prefer hearing them in balanced mode I would not hesitate to listen either way. The only recommendation I can make though is that I found cables did matter. These amplifiers can take advantage of the qualities a great cable has to offer and I suggest that you find the best you can, then sit back to relax and enjoy what should amount to a night (or day) of great musical enjoyment. The Acoustic Revive interconnects retail for \$900 and their XLR cables are \$975 a pair so you can see I did not go cheap with the cables. I also tried some Audience Conductor e interconnects which retail for only \$391 for a one meter pair and I was quite pleased with them as well. An old favorite of mine is Joni Mitchell's *Court and Spark* [Asylum 1001-2] and especially the title song "Court and Spark". Here with the RCA cables I still enjoyed Joni Mitchell playing guitar and singing while her band accompanied her. Without hearing them side by side I would not have been tempted to put the XLR cables back in as they sounded that good even in unbalanced mode. Returning to the balanced XLR cables did however bring with it a smoother quieter feel to the music with just a slightly larger soundstage. If I had a choice I would no doubt go the balanced route, if not I would still purchase the amplifiers today and use the RCA cables until I got a fully balanced setup to accompany it at a later time. Either way these are a tremendous pair of amplifiers.

## The Sweet Sound Of Violins And The Growl Of Bass Notes

Getting back now to the XLR cables I next played *The Romantic Violin* [HCD-2-3702] featuring six classical pieces from such great composers as Beethoven and Brahms as well as others. Violins have a tendency to sound shrill when played with less than adequate equipment, but never once was I seen running to lower the volume when played with the Bryston 7B's. Here they made every musical piece sound liquid and smooth as I went from one classical composition to the other. Of particular note was a selection from the composer Edouard Lalo's *Symphonie Espagnole* in D minor op. 21 where the violin of Roggiero Ricci hit some pretty high notes. Here his violin sounded to have the correct timbre and was therefore a pleasure to hear. Mr. Ricci performed with the German Bochum Symphonic Orchestra, conducted by Matthias Kuntzsch. For those not familiar with Mr Ricci, his career as a violin virtuoso spanned seventy-years and started at age ten. He was born in San Bruno, California and is now ninety-years old. Lastly I turned to Neil Young's *Prairie Wind* [Reprise 49593-2] to search for that in your gut feeling of bass. If you like to feel bass notes both Carlos Santana and Neil Young CD's will do the trick. Here the Bryston amplifiers had no trouble giving me that powerful full bass feeling in my chest as it shook the floor when playing some parts of "He Was the King". All in all these amplifiers from Bryston were able to play a wide range of music and were very pleasing no matter what I spun on my CD player as it faithfully reproduced what it was feed through various source equipment.

## Final Thoughts

My experience with the Bryston 7B SST<sup>2</sup> amplifiers was nothing short of breathtaking. Being able to listen at levels quiet enough to allow my loved ones to sleep undisturbed, while still retaining a solid feel to the music, was definitely a big plus in my book. The amplifiers had a very tube like magical transparency that gave the music a live "you are there" type of effect. It did all this yet still put out 600-watts of solid-state power whenever it was called upon to do so. They gripped my seven-driver (185 pounds each) Legacy Focus 20/20 speakers with its 12-inch transition woofer and two 12-inch subwoofers and then never let go. I always felt I had plenty of power in reserve as if they were coasting along like a runner in a marathon with plenty of stamina left in the tank. Put them in the proper listening environment, with the right associated equipment plus some good cables and get ready to re-listen to some of your old selections as if for the first time. I like amplifiers that can create good depth to the soundscape and here once again the Bryston's delivered.

Let us not also forget that being monoblock in design they can be put on the floor one behind each speaker thereby keeping speaker cables short and interconnects long if that is what you desire. As for the noise floor I must say we are talking pin drop quiet with these amplifiers and believe me I can be very picky when it comes to this. Looking at the spec sheet you can see that they are about as quiet as you could expect an amplifier to be as they are approaching and I quote from Mr. Tanner, "...the theoretical limit of the amplifying devices". Now at only \$3995 each ( \$7990 a pair), they felt bargain priced with their quality of construction, engineering designs, ample features, long warranty, attractive faceplate and ability to create a "you are there" type of musical experience at both low and high volume levels. These were amplifiers that if I had been told were \$10,000 a pair, considering all they had to offer, I would have thought them still to be competitively priced. Our neighbors to the North, up in Canada, have indeed come up with a product worthy of our attention and I would think you should get hold of a pair now before they come to their senses price wise. The whole team up at Bryston should be happy as they did a great job all the way around with their new 7B SST C-Series Squared amplifiers.

## Specifications

Type: Solid-state monoblock amplifier  
Power Output: 600 watts @ 8 Ohms (900 watts @ 4 Ohms)  
Gain Select And Sensitivity: 29dB-2.3Vin=600w @ 8 ohms-(1V Position)  
23db-4.6Vin=600w @ 8 ohms-(2V Position)  
Input Impedance: 50kOhms single ended, 20kOhms balanced  
Distortion IM or THD+Noise: <0.005% 20Hz to 20kHz at 600 watts  
Noise: >110dB below rated output 29dB gain (-75dBu)  
Slew Rate: > 60 volts per microsecond  
Power Bandwidth: <1 Hz to over 100 kHz  
Damping Factor: Over 300 at 20Hz, ref. 8 ohms  
Dimensions: 19 x 5.25 x 12.5 (LxHxD)  
Weight: 50 lbs.  
Face Plates: Both silver and black are available  
Price: \$3995 each (\$7990 per pair)

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