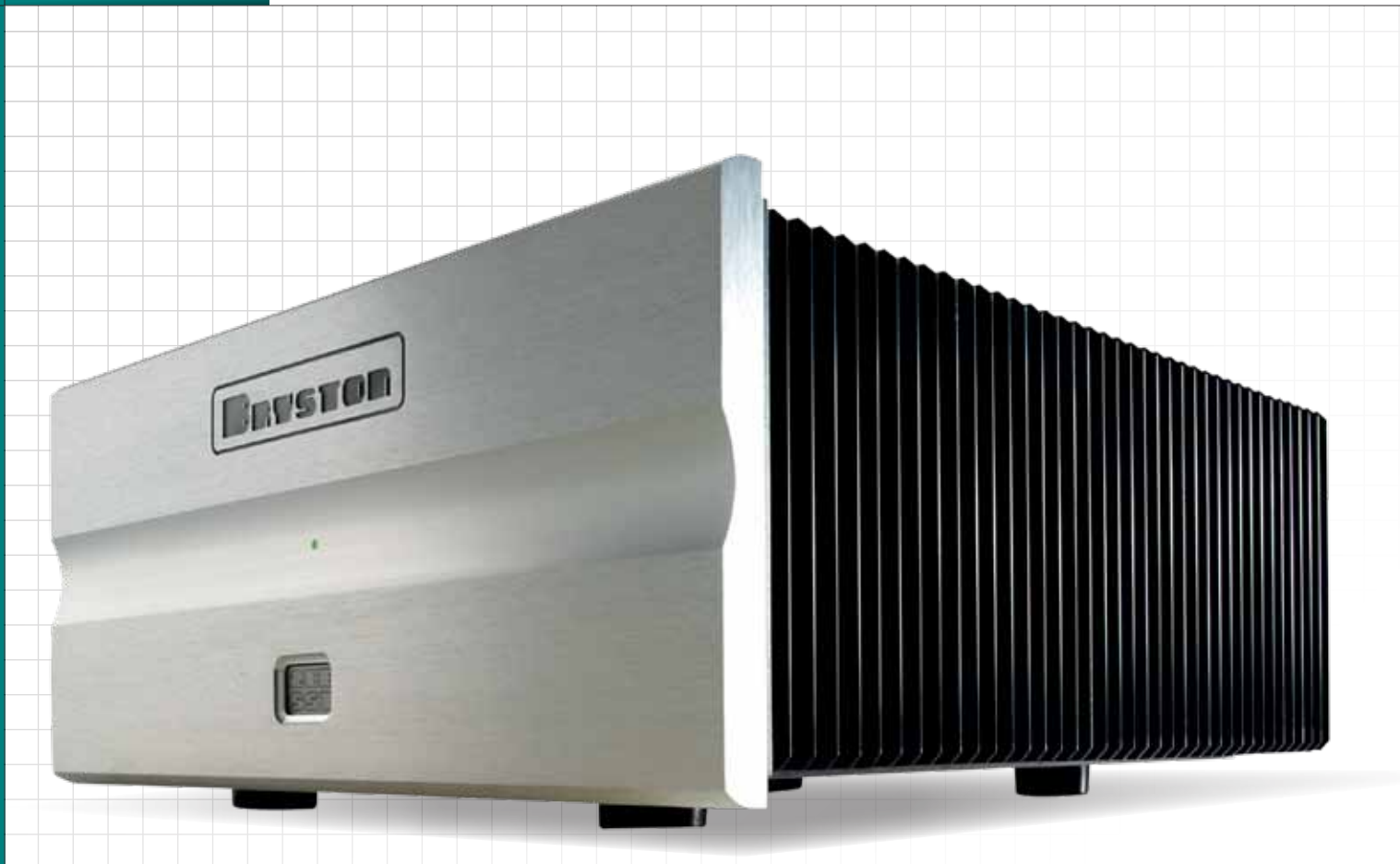
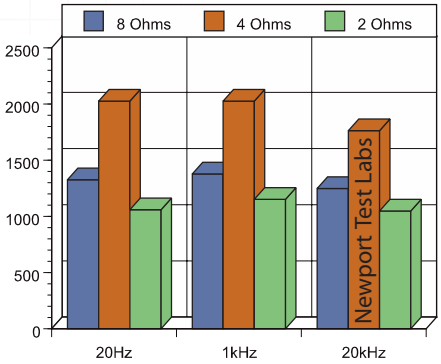


Bryston 28B SST²

MONOBLOC POWER AMPLIFIER

One of the most common questions in audio is: 'How much amplifier power do I need to drive these speakers?' If the speakers in question are extraordinarily efficient, such as a pair of Lowthers, the answer might be that you need as little as 1-watt (though personally, I am always loath to recommend any amplifier rated at less than 20-watts per channel, making exceptions only for some valve designs). Mostly, you'll hear recommendations for amplifier power output that range somewhere between 50-watts per channel and 200-watts per channel. So when Bryston announced that its new 28B SST monobloc would be rated at 1,000-watts (and no, that wasn't a misprint: one thousand watts or, if you prefer, one kilowatt…) into an 8Ω load, many people asked the obvious question: Why?

The answer was very simple, according to Bryston's CEO, Chris Russell. He said that Bryston's customers had asked for it… and you can't argue with that logic. But that original 28B was first released 'way back in 2007… why has Bryston now released a 'Mk2' version of the 28B SST… known, rather confusingly, as the 28B SST²? Because… but I guess you already know the answer to that!



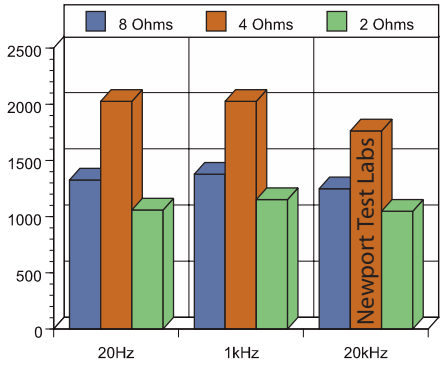
Power Output: Single channel driven into 8-ohm, 4-ohm and 2-ohm non-inductive loads at 20Hz, 1kHz and 20kHz. [28B SST2]

THE EQUIPMENT

It would be sheer understatement if I told you the Bryston 28B SST² was very big. It's not only big, it's damn huge! And it weighs a tonne… or more specifically, each amplifier measures 483×205×521mm and weighs 42kg, so with the weight of the two amplifiers you'll need for stereo coming in at around 84kg, these are amplifiers you'll likely be placing on the floor, rather than on (or in) an equipment rack! That said, placing them on the floor is one of the major advantages of using monoblocs, because you can place each amplifier very close to the speaker it is driving, thus simultaneously minimising cable length and maximising amplifier drive.

Which means, of course, that you have to run long signal cables… and it is for that reason the 28B SST² has balanced signal inputs. You can run balanced cables a long, long way without degrading the audio signal. They're also much thinner and 'tidier' than speaker cables, so your system will look much better. (But, if you like the look of the hose-pipe speaker cables you'll need to handle the power of the 28B SST²s, you can also use standard unbalanced interconnects to connect them to your preamplifier and/or source components, because Bryston provides these as well.

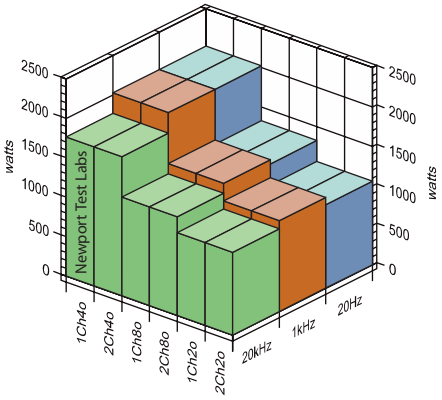
So why is the 28B SST² so big and so heavy? One reason is that there's no fan cooling, therefore no fans to create unwanted noise in the room. The downside of not having fans to cool the amplifier is that the all-essential cooling has to be achieved using solely convection, which means there has to be a whole lot of heat-sinking going on. I



Power Output: Single channel driven into 8-ohm, 4-ohm and 2-ohm non-inductive loads at 20Hz, 1kHz and 20kHz. [28B SST2]

didn't calculate the area of the heat-sinking on the 28B SST², but it's a whole heap!

Another reason for the size of the amplifier is that it has to accommodate a huge, custom-made 2000VA toroidal transformer and no fewer than sixteen 10,000µF electrolytic capacitors, which aren't small either. Yet another reason is that Bryston has 'overspecified' virtually every single electronic part inside the 28B SST², including the 32 bipolar output transistors (all of which are individually tested and gain-matched before being soldered onto the PCBs). The attention to component quality and gain-matching is not only for reasons of sound quality: it's also essential in order that Bryston can continue to offer its unprecedented 20-year amplifier warranty.



Power Output: Single and both channels driven into 8-ohm, 4-ohm and 2-ohm non-inductive loads at 20Hz, 1kHz and 20kHz. [Bryston 28B]

Despite Bryston having been offering this industry-leading warranty for more years than I care to remember, no other amplifier manufacturer has yet been brave enough to offer an equally-generous warranty—which, incidentally, includes parts *and* labour.

In common with most very high-power amplifiers, the 28B SST² has a bridged output stage, so essentially two separate amplifiers are being used to reproduce the audio signal. This means that each of the amplifiers has to be very good indeed, because since you essentially 'double-up' on distortion, noise-levels and output impedance to create the desired output signal, all these must be extremely low to start with. One side-effect of using a bridged output is that the 'negative' terminal is not at chassis ground, as it is with conventional amplifier output stages. This means that you should not connect the speaker outputs of the 28B SST² to any device that might route the negative terminal to ground (such as a subwoofer or a powered speaker, including—maybe—some electrostatics, though I understand the 28B SST²s work fine with Quad ESL-989s) without first ascertaining whether it's safe to do so. (If you have any queries about this, ring Sennheiser Australia, which is the Australian distributor for Bryston.)

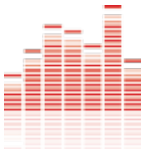
If you are connecting the Bryston to conventional passive loudspeakers, you won't have a problem. (And, in the event that the 'negative' terminal does accidentally contact ground, I doubt that anything would happen other than the amplifier would automatically shut itself down, because the protection circuitry inside the 28B SST² is very sophisticated, so that in addition to looking for shorts, grounded negative connections, d.c. offsets and such-like, it has other fault condition detectors as well, plus an innovative circuit that controls the mains current draw whenever the amplifier is switched on. (If it didn't, your household 240V circuit-breakers would probably trip whenever you switched the 28B SST² on! Even with the circuit, there's an audible 'thud' whenever the amplifier is switched on… you can even feel the chassis move as a result of the in-rush current.)

As you can see, it doesn't get much simpler than the front panel of the Bryston

BRYSTON 28B SST²
MONOBLOC POWER AMPLIFIER

Brand: Bryston
Model: 28BSST²
Category: Monobloc Power Amplifier
RRP: $28,998 per pair
Warranty: Twenty Years
Distributor: Sennheiser Australia Pty Ltd
Address: Unit 3. 31 Gibbes Street
Chatwood NSW 2067
☎ **1800 648 628**
☎ **(02) 9910 6700**
sales@sennheiser.com.au
http://en-au.sennheiser.com/distributed-brands

- Power
- Finesse
- Imaging
- Warranty



- Big
- Heavy
- Hot
- Expensive

LAB REPORT

Readers interested in a full technical appraisal of the performance of the Bryston 28B SST² Monobloc Power Amplifier should continue on and read the LABORATORY REPORT published on page 94. Readers should note that the results mentioned in the report, tabulated in performance charts and/or displayed using graphs and/or photographs should be construed as applying only to the specific sample tested.

Lab Report on page 94

28B SST²: There's a single power switch and a status LED… that's it. The status LED glows red whenever the amplifier is powering-up, glows green when the amplifier is operating normally, flashes red when the amplifier's output is being clipped (!) (you'll have to read on a little to see why I included the exclamation mark), and glows red if the amplifier has overheated and triggered the thermal sensor protection (also about which more later).

The front panel itself comes in black or silver finishes, plus you can order it 'plain' or in a rack-mounting version with the necessary bolt-holes and handles for use in a standard professional equipment rack. Though I imagine the rack-mount versions were designed for the recording studio and sound reinforcement guys, if I were buying a pair of 28B SST²s for home use, I'd personally specify the rack-mount versions too, because I reckon they not only look better, but are easier to move around. (They also have a rear-panel volume control that's not fitted to the consumer version).

The rear panel is where all the action is on the Bryston 28B SST², as you can see from the photograph accompanying this review. At the top is the balanced input, using an XLR socket, alongside which Bryston has clearly marked the pin-outs (always nice, since XLR connections do not always conform to the standard… although Bryston's pin-outs are exactly as per the standard). Directly underneath the XLR socket is the unbalanced input, implemented via a single gold-plated RCA terminal. To one side of the terminals is a switch to select between the two inputs (which proves the XLR input is truly balanced!) and to the other side a switch that alters the amplifier gain by 6dB.

Two pairs of speaker output terminals are provided, but the pairs are connected internally, so you can use two sets of speaker wires just for extra wire cross-sectional area or for bi-wiring. The quality of the terminals is outstanding—you'll never need anything better. Underneath the terminals is a very sensible line of type: *'Do Not Connect Any Output Terminal To Ground'*. I say sensible because there's an excellent chance that someone installing a power amplifier would not bother to read the manual, in which case they might not realise the Bryston 28B SST² has a balanced output stage. I was also really pleased to see that Bryston has also coloured the 'negative' terminals blue, rather than the more usual black, which would immediately alert someone 'experienced in the art' (as the patent people like to say) that the negative terminal was not at chassis ground.

Lower down on the rear panel is a 12V trigger, which will be useful to turn the Bryston on and off remotely, such as if it's used in a home automation system or in a professional installation. There's also a 240V circuit-breaker. This is a magnetically-tripped switch designed to protect the amplifier under specific fault conditions. It is NOT a mains power switch as such, and so should always be left on except during installation or if you're moving the amplifier from one location to another. (In other words, don't use it to turn the amplifier on and off… that's what the front-panel switch is for!)

IN USE AND LISTENING SESSIONS

The fact that the Bryston 28B SST² has a clipping indicator is no doubt simply a reflection of the fact that it uses what's basically the same protection circuitry found in Bryston's somewhat lower-powered SST² amplifiers (and when I say 'somewhat lower powered' that is definitely only by comparison with the 28B SST², because even the very lowest-powered of Bryston's other SST² amplifiers is rated at 140-watts per channel, whilst the most powerful is rated at 600-watts per channel, just 2.2dB less than the 28B SST²), because I simply cannot conceive of any scenario where you'd ever be able to drive a Bryston 28B SST² amplifier into clipping… *ever*. Perhaps if you were the sound engineer at a performance by Disaster Area* you might see the clipping indicators light briefly, but even then I'd doubt it.

If you're not familiar with the phenomenon of amplifier clipping, I proffer the explanation I found in the Bryston 28B SST²'s Owners Manual: '*Clipping occurs when the channel output level no longer can follow the level increase at the input (overdriven input condition). When the 28B SST² is driven into clipping the LED will change from green to red then back to green when the level is reduced (Flashing Red). Momentary clipping can be tolerated, however it indicates that maximum undistorted power has been surpassed and potential speaker damage may result if overload conditions persist. Any amplifier that is constantly operated into clipping indicates a more powerful amplifier is needed for that application.*' (I suspect this explanation is a tongue-in-cheek inclusion by Bryston's PR & Communications person, James Tanner, who, I am reliably informed by my esteemed editor, has a very dry wit. I, too, was rather amused by the implied suggestion that if the Bryston 28B SST² exhibits clipping, you should 'find a more powerful amplifier'. An amplifier more powerful than the Bryston 28B SST²? Oh yeah…good luck with that!)

When you are dealing with an amplifier as powerful as the 28B SST² (note that I am using the singular because it's easier… I know you need two of these amplifiers for stereo!) you need to be very strict about religiously following the 'switch-

on sequence' rule, where you must first power-up all 'downstream' components and allow their circuits to completely stabilise before switching on the 28B SST² and, when powering down, you first switch off the Bryston before switching off any other component. The rationale for this is that if one of the downstream components creates a transient of some type when it's switched on or off, the 28B SST² will amplify it and send it to your speakers, which could be damaged as a result. And don't be mislead by the fact that your other components may not appear to make any sound when they're being switched on or off—switch-on transients don't have to be audible: they could be infrasonic or ultrasonic, in which case although you can't hear the transient, your speakers will still be having to deal with it.

I started auditioning the Bryston 28B SST² monoblocs at whisper-quiet levels, far lower than I would usually listen (except, perhaps, late at night), because it's these low levels that are usually the *Achilles Heel* of high-powered amplifiers, because the circuitry required to allow them to deliver such high power levels is often too 'heavy-duty' to allow finesse at very low listening levels. So I was totally surprised by the performance of the Bryston 28B SST² monoblocs at these low levels… because it was absolutely perfect. Firstly, I could hear no audible noise at all, even with my ear pressed to a tweeter, so when things were supposed to be silent, that's exactly what I heard… nothing at all, just pure silence. Then, when music was playing, I found it sweet-sounding, with no 'roughness' audible at all, and the music flowed along liquidly, perfectly paced and beautifully rhythmic, just as if I were listening to a state-of-the-art power amplifier with a much lower power rating. Indeed when I A–B'd against just such an amplifier (rated at 90-watts per channel) I literally could not tell the two amplifiers apart…

… at least I couldn't at low playback levels. As I ramped up the volume, both amplifiers sounded just as clean until the music approached what I'd call realistic in-room levels (that is, the levels I hear when music is being played live in my listening room, which happens regularly thanks living in a musical family), at which point the Bryston 28B SST² monoblocs showed the other amplifier a clean pair of heels. Both amplifiers still sounded wonderful and clean, with no audible distortion or noise, but the Bryston monoblocs sounded more transparent, so that the finer musical details in the recordings were revealed effortlessly.

You'll be able to hear this effect for yourself in your own pre-purchase auditioning sessions by listening to a recording of a piano… and you won't have to listen at 'loud' levels…just turn the volume up to what you'd hear if a piano were positioned midway between the speakers and you'll hear what I mean straight away… though it will help if you're listening to large, floor-standing speakers! My personal preference for this audition is usually Keith Jarrett's Koln Concert, but after I'd listened to it played back via the Brystons, I was so enraptured that I followed up immediately with the concerts he played two years earlier, in Bremen and Lausanne, both of which are available as a 2CD set. (However, being ECM, they're also available on vinyl, as is the Koln Concert. Strangely enough, I prefer my vinyl version of the Koln Concert to my CD version, whereas I prefer the CD version of the Bremen/Lausanne over the LP version.)

In the Koln Concert (Part 1) listen especially to the sound of the piano around three minutes in when he's stabbing the piano keys hard with the fingers on his right hand, but caressing them softly with his left. The Bryston differentiated the two perfectly. Listen, too, to the vividness with which you can hear Jarrett's stool creak… the reality is uncanny, with the chair sound totally divorced from the musical thread… at least it was when I listened via the 28B SST²s… I can't say that for the other amps I tried.

I also appreciated the musical abilities of the Bryston 28B SST² when listening to Glen Hansard's new 'Drive All Night' CD—the one which has the studio version of Bruce Springsteen's *Drive All Night*, which he toured back in 2012, plus studio versions of *Pennies in the Fountain*, *Renata* and *Step out of the Shadows*. Normally I refuse to buy CDs with less than 20 minutes of music on them, but for this one I thought, to paraphrase Leonard Cohen, 'I would make an exception'. [*Yeah, yeah, Chelsea Hotel #2, we get it*… Editor] If you're a Glen Hansard fan you'll already have this, but if you're not, get out and buy it straight away, the music is great (as usual) but the sound quality is exceptionally good… amazingly good… unreal in fact. Full marks to everyone involved in the production of this CD, which is as clean as a whistle, perfectly tonally balanced, so you can hear every instrument and every backing vocal harmony (and the vocal harmonies are beautifully entrancing, and most particularly so on *Renata*).

I trialled a representative selection of loudspeakers with the Bryston and it drove every single pair with unfailing accuracy. I also bread-boarded some low-impedance loads in parallel with the speakers to simulate some *really* difficult speaker loads, all to no avail if my aim was to trip up the 28B SST²s in some way, because trip them up I could not… the amps powered on, oblivious to what type of load was connected to their output terminals. Because of this, I was a little puzzled by the instruction in the manual that the company states: '*NB: The minimum recommended loudspeaker load is 4Ω.*' Some of the loads I used resulted in impedances lower than this at some frequencies, and the Bryston 28B SST²s worked perfectly when driving them.

My only real gripe about the Bryston 28B SST²s is that they ran very hot, particularly when playing at very low volume levels and most particularly when I was not using them at all (I left them switched on 24/7 throughout the review period). This didn't seem to bother them, and the thermal protection never once tripped, but with the two of them on all the time it became so warm in my listening room that air-conditioner was kicking in more often than usual. If I owned a pair of 28B SST²s I'd switch them off when I wasn't using them… they warm up fast enough that you'll be getting maximum sound quality within minutes. (I certainly wouldn't be switching the amplifiers off to make the internal components last longer: as I wrote earlier, the Bryston 28B SST²s come with a 20-year guarantee.)

DISASTER AREA

*If you are not familiar with the band Disaster Area and its sound engineers, you're obviously not familiar with Douglas Adams' famous novel 'Hitchhiker's Guide to the Galaxy.' So, to avoid any confusion, I extracted the following explanation from the Hitchhiker's Wiki on the Internet: *'Disaster Area was a plutonium rock band from the Gagrakacka Mind Zones generally regarded as not only the loudest rock band in the Galaxy, but also as being the loudest noise of any kind at all. Regular concertgoers judged that the best sound balance was usually to be heard from within large concrete bunkers some thirty-seven miles away from the stage, whilst the musicians themselves played their instruments by remote control from within a heavily insulated spaceship which stayed in orbit around the planet—or more frequently around a completely different planet.'*

For more: www.hitchhikers.wikia.com/wiki/Disaster_Area... or, preferably, read the book… or, rather, all four books in the trilogy! C.C.

CONCLUSION

If you want a *really* high-powered amplifier, there's really no need to 'compare the market' before taking the not-inconsiderable plunge: Bryston's 28B SST² monoblocs are the amplifiers you should buy. Simples!

Chris Croft

LAB REPORT ON PAGE 94

CONTINUED FROM PAGE 26

LABORATORY TEST RESULTS

I normally start my analysis of *Newport Test Labs'* test results with the power output measurements of amplifiers, because it's this test that most interests most readers, according to most surveys. However in this case, even I was interested in how much power the Bryston 28B SST² was able to deliver on the test bench. Rather unsurprisingly, knowing Bryston, the amplifier easily exceeded its specification at all test frequencies, into all test loads. At 1kHz into an 8Ω load the Bryston 28B SST² delivered 1,378-watts of power, and only slightly less at 20Hz (1,326-watts) and 20kHz (1,250-watts).

Despite being rated at only 900-watts into 4Ω loads by Bryston, *Newport Test Labs* measured the 28B SST² as delivering 2,025-watts at 20Hz and 1kHz, and 1,764-watts at 20kHz. When driving a 2Ω load (for which the amplifier is not rated, and also a load for which the Bryston is not recommended) the 28B SST² delivered just over 1,000-watts, irrespective of test frequency. Note that *Newport Test Labs* tested only one monobloc, one reason being that testing two simultaneously would have exceeded the capacity of the 240V mains power circuit. Even when testing just the one amplifier the mains voltage sagged from 242 volts down to 235 volts when the amplifier was delivering maximum power into an 8Ω load.

The frequency response of the Bryston 28B SST² was exceedingly flat across the audio band, almost completely unaffected by load impedance, very extended at low frequencies and moderately extended at high frequencies. Overall the response extended from 0.2Hz to 141kHz ±1.5dB, with the response 1dB down at 0.4Hz and 73kHz. You can see the response within the audio band depicted in Graph 5, where the black trace shows the frequency response into a standard 8Ω resistive load and the red trace shows the response when the Bryston was driving a load that simulates that of a two-way bass reflex loudspeaker. You can see that within the audio band (20Hz to 20kHz) the response is ruler-flat from 20Hz up to 2kHz, where it edges up around 0.04dB to 10kHz, after which it rolls off back to reference at 20kHz. So, across the audio band, the normalised frequency response was measured as 20Hz to 20kHz ±0.02dB. When driving the simulated speaker load, you can see some vary small variations away from reference below 1kHz, then larger ones at 3kHz and 15kHz. However, even into this load the normalised response that was measured by *Newport Test Labs* for the Bryston 28B SST² was 20Hz to 20kHz ±0.07dB.

Distortion was vanishingly low at an output of one watt. Into an 8Ω load (Graph 1) only the first three harmonics are high enough to be worth mentioning, and even the 'most prominent' of these (the third harmonic) is more than 100dB down, equivalent to just 0.001% THD. The other two are the second harmonic at –108dB (0.00039%) and the fourth harmonic at –114dB (0.00019%). The few other harmonic distortion components visible (only the fifth, sixth and eighth) are all more than 120dB down and so each contribute less than 0.0001%. The story is much the same when driving a 4Ω load, except that the third harmonic has risen a little to –98dB, equivalent to just 0.0012% THD, and the second harmonic to –108dB (0.00039%) with the fourth harmonic remaining at –114dB (0.00019%). The few other harmonic distortion components visible are all more than 120dB down, so each contributes less than 0.0001%. The noise floor is low, particularly at low frequencies (the extreme left-hand edge of the graph).

THD remains vanishingly low at rated power also, though more high-frequency components are visible. Perhaps what's most spectacular about Graphs 3 and 4 is that the noise floor of the amplifier has mostly dropped below the –140dB noise floor of the test instrument itself (though if you look closely at the leftmost edge of the graph you can see the low-frequency noise is still around –90dB. Again, the only vaguely significant distortion components are low-order (2nd, 3rd and 4th harmonics) and except for the third-order component, which sits at –103dB (0.0007%) when the amplifier is delivering 1,000-watts into 8Ω loads, and –98dB (0.0012%) when the amplifier is delivering 900-watts into 4Ω loads, the second and fourth-order components are more than 110dB down (0.00031%) and all other components more than 120dB down (0.0001%). As you'd imagine, this means the overall THD+N figures are low… very low. As measured by *Newport Test Labs*, the one-watt result was 0.002% and the 1,000-watt result was 0.003%.

Newport Test Labs measured the Bryston 28B SST² as delivering 2,025-watts into 4Ω…

CCIF intermodulation distortion (Graph 5) was also outstandingly good, with the unwanted regenerated tone down at 1kHz being only –107dB (0.00044%). Also, as you can see, there were only two sidebands accompanying the 19kHz and 20kHz test signals, and both were exactly the same, and exactly 100dB (0.001%) down.

As the low noise floors would suggest, the overall signal-to-noise ratios were low… very low, as you can see from the tabulated results. Referred to an output of 1-watt, the S/N ratio of the Bryston 28B SST² was measured by *Newport Test Labs* as being 90dB unweighted, improving to 96dB A-weighted. Referred to rated output, these figures improved to 119dB unweighted and 125dB A-weighted. Obviously, these latter ratios are helped along by the high power output of the amplifier, but they're still stunningly good results.

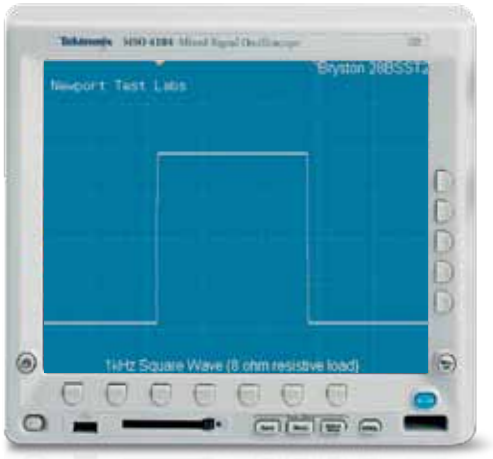
Bryston 28B SST2 Power Amp — Power Output Test Results

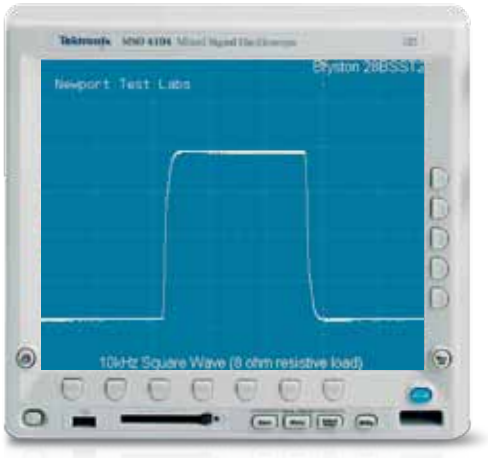
Channel	Load (Ω)	20Hz (watts)	20Hz (dBW)	1kHz (watts)	1kHz (dBW)	20kHz (watts)	20kHz (dBW)
1	8 Ω	1,326	31.2	1,378	31.4	1,250	30.9
1	4 Ω	2,025	33.0	2,025	33.0	1,764	32.4
1	2 Ω	1,058	30.2	1,152	30.6	1,050	30.2

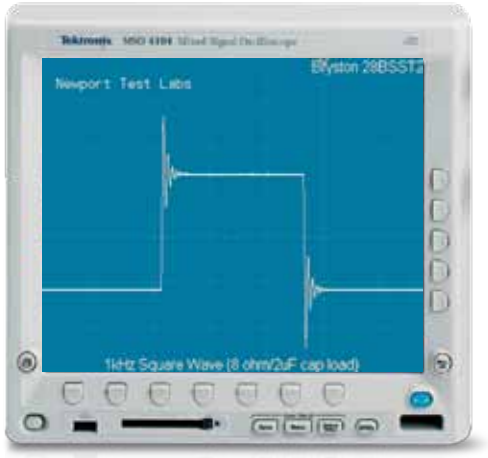
Note: Figures in the dBW column represent output level in decibels referred to one watt output.

Bryston 28B SST2 Monobloc Power Amp — Test Results

Test	Measured Result	Units/Comment
Frequency Response @ 1 watt o/p	<0.4Hz – 73kHz	–1dB
Frequency Response @ 1 watt o/p	<0.2Hz – 141kHz	–3dB
Channel Separation (dB)	dB / dB / dB	(20Hz / 1kHz / 20kHz)
THD+N	0.002% / 0.001%	@ 1-watt / @ rated output
Signal-to-Noise (unwghted/wghted)	90dB / 96dB	dB referred to 1-watt output
Signal-to-Noise (unwghted/wghted)	119dB / 125dB	dB referred to rated output
Input Sensitivity (Bal/23dB Gain)	203mV / 6.3V	(1-watt / rated output)
Input Sensitivity (Bal/29dB Gain)	103mV / 3.25V	(1-watt / rated output)
Output Impedance	0.04Ω	@ 1kHz
Damping Factor	200	@ 1kHz
Power Consumption	N/A / 177	watts (Standby / On)
Power Consumption	161 / 1,055	watts at 1-watt / at rated output
Mains Voltage Variation during Test	235 – 244	Minimum – Maximum







In fact, all measurements of the Bryston were made using the amplifier's balanced inputs.

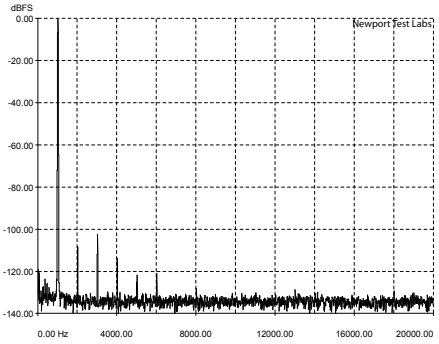
Given the amplifier's performance into a simulated speaker load, I was not at all surprised to see that its output impedance was measured at a low 0.04Ω at (1kHz), which gives a damping factor of 200 (into 8Ω). This is 'way more than required, and an excellent result.

Square wave performance was marvellous. The 100Hz and 1kHz square waves look like they came straight from the square wave generator. Perfect performance. At 10kHz some slight rounding of the leading edge of the waveform is obvious, but it's far less than I'd expect for an amplifier at this test frequency. When the amplifier is driving a highly capacitative load (2µF paralleled with 8Ω), there's a fairly large initial overshoot, but the ringing is very quickly damped. This is an amplifier that will be stable into difficult loads.

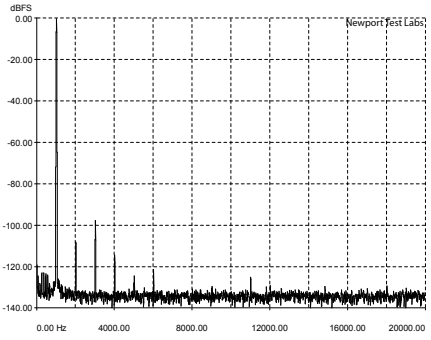
Mains power consumption was high. The figures shown are for a single amplifier, so two amplifiers will be pulling nearly 400-watts from your mains when they're switched on, but not actually being used. Consumption actually drops a little when you're playing music at low levels, but if you did manage to operate a pair of 28B SST²s at their maximum output, you'd be pulling around 2,200-watts from your mains supply.

Gain was a little different to what's claimed, with the actual gain at 28.6dB for the marked '29dB' position, and 22.8dB for the marked 23dB position, but these tiny differences are not significant. Perhaps more significant is that the amplifier maintains signal polarity from input right through to output (that is, it's non-inverting) so absolute phase will be preserved (as it should be).

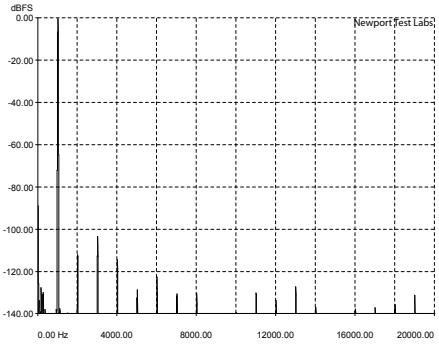
The performance of Bryston's 28B SST² on *Newport Test Labs'* test bench was outstandingly good: it returned results that are amongst the best I have ever seen for any amplifier, and absolutely the best I have seen from a high-power amplifier. Awesomely awesome! ***Steve Holding***



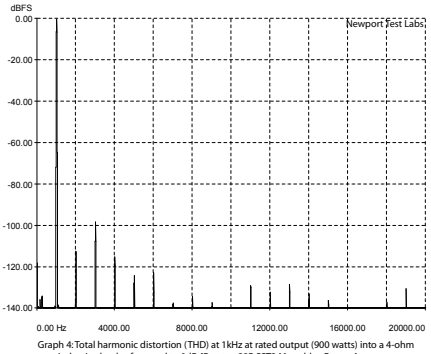
Graph 1: Total harmonic distortion (THD) at 1kHz at an output of 1-watt into an 8-ohm non-inductive load, referenced to 0dB. [Bryston 28B SST2 Monobloc Power Amplifier]



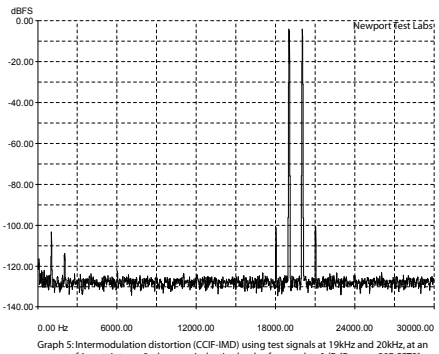
Graph 2: Total harmonic distortion (THD) at 1kHz at an output of 1-watt into a 4-ohm non-inductive load, referenced to 0dB. [Bryston 28B SST2 Monobloc Power Amplifier]



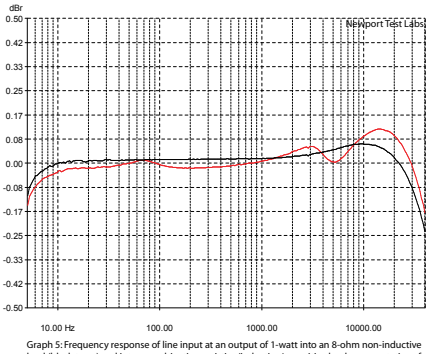
Graph 3: Total harmonic distortion (THD) at 1kHz at rated output (1,000 watts) into an 8-ohm non-inductive load, referenced to 0dB. [Bryston 28B SST2 Monobloc Power Amp]



Graph 4: Total harmonic distortion (THD) at 1kHz at rated output (900 watts) into a 4-ohm non-inductive load, referenced to 0dB. [Bryston 28B SST2 Monobloc Power Amp



Graph 5: Intermodulation distortion (CCIF-IMD) using test signals at 19kHz and 20kHz, at an output of 1-watt into an 8-ohm non-inductive load, referenced to 0dB. [Bryston 28B SST2]



Graph 5: Frequency response of line input at an output of 1-watt into an 8-ohm non-inductive load (black trace) and into a combination resistive/inductive/capacitive load representative of a typical two-way loudspeaker system (red trace). [Bryston 28B SST2 Monobloc Power Amp]

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