stereophile

EQUIPMENT REPORT

Electronically reprinted from January 2008

Bryston
28B-SST
MONOBLOCK AMPLIFIER

Larry Greenhill

DESCRIPTION Solid-state monoblock power amplifier with balanced and unbalanced inputs. Specified output power: 1000W continuous sinewave power into 8 ohms, 20Hz–20kHz (30dBW). Power bandwidth: 1Hz–100kHz, ±3dB. Distortion: 0.005%, 20Hz–20kHz at 1kW into 8 ohms. Intermodulation distortion: 0.007%, 60Hz+7kHz mixed 4:1. Signal/noise ratio: 110dB ref. 29dB gain, full output, input shorted, 20Hz–20kHz. Damping factor: >500 at 20Hz, ref. 8 ohms. Input sensitivity for full output: 3.2V unbalanced (29dB setting), 6.4V balanced (23dB setting). Input impedance: 30k ohms unbalanced, 60k ohms balanced. Polarity: non-inverting. Slew rate: 120V/µs. Power consumption, 1000W into 8 ohms: 1465W.
FINISHES silver, black. C-series, rack-mount, Pro versions.
DIMENSIONS 19" (483mm) W by 8.05" (205mm) H by 20.525" (521mm) D. Weight: 92 lbs (42kg).
SERIAL NUMBERS OF UNITS REVIEWED 000042, 000043.
PRICE $16,000/pair. Approximate number of dealers: 200. Warranty: 20 years, transferable with original bill of sale.
MANUFACTURER Bryston Ltd., 677 Neal Drive, Peterborough, Ontario K9J 7Y4, Canada. Tel: (705) 742-5325. Fax: (705) 742-0882. US: Bryston USA, 30 Coventry Street, Newport, VT 05855. Tel: (802) 334-1201. Fax: (802) 334-6658. Web: www.bryston.ca.

Bryston 28B-SST monoblock amplifier

It was a hot, humid, New York City evening in early August, and I was thankful to be sitting in the air-conditioned dark of Avery Fisher Hall, up in the Second Tier, for a Mostly Mozart concert. Listening to cello soloist Alisa Weilerstein in Osvaldo Golijov's hypnotic *Azul*, I was suddenly jolted by an explosive mix of primitive cello sonorities, accordion, and staccato riffs on ethnic percussion instruments. My thoughts turned to the importance in music of both power and delicacy, and of how Bryston Ltd.'s 28B-SST, a 1000W monoblock power amplifier, was designed to address both.

Design
Why is Bryston selling a 1kW monoblock? The company's CEO, Chris Russell, explained that customers had requested more power than was available from Bryston's 600W monoblock, the 7B-SST (reviewed in the April 2003 *Stereophile*, Vol.26 No.4), for reasons cited by Michael Fremer in his review of the Musical Fidelity 550K Supercharger monoblock in September 2007 (Vol.30 No.9): more involvement with the music at more realistic volume levels. In addition, monoblocks let you use very short lengths of speaker cable: an amp can be placed right next to each speaker.

As in Bryston's other monoblock designs, the 28B-SST's output stage com-

bines two amplifiers permanently bridged in series and operated out of phase with one another. This allows the amplifier to swing high voltages into the load. (If the owner insists on using speakers of very low impedance, such as the Apogee Scintilla, the 28B-SST's output stage must be rewired in parallel at the Bryston factory.) The bridged output stage proved successful in the 7B-SST, which excelled in what I called in my 2003 "Follow-Up" its "neutrality," "incredible deep-bass abilities," and "terrific soundstage depth and midbass punch"; and the two-channel 14B-SST (November 2002, Vol.25 No.11), which produced what I described as "solid, massive deep bass that was rich and expansive," despite its "unflappable neutrality."

So, other than its 1kW power rating, what's new and different in the 28B-SST? Well, wires have been virtually eliminated—circuit boards are connected with gas-tight, gold-to-gold contacts. As a result, Bryston needs to do much less hand tweaking during manufacture. Other new features in the 28B-SST include its discrete input-buffer circuit, which uses a symmetrical design to reduce distortion. Bryston is so pleased with this circuit's performance that they'll be using it from now on in *all* SST-series amplifiers. The power supply includes a huge toroidal transformer made by Plitron and rated at 2000VA continuous power. (Plitron also makes the Torus Power Isolation Units, reviewed here in a sidebar.) The 28B-SST has been given a new, highly reliable On/Off pushbutton, and heatsinks that maximize heat dissipation for long-term operation without a fan having to be used. Because the 28B-SST's components and circuits are

MEASUREMENTS

I preconditioned the Bryston 28B-SST by running it at 330W into 8 ohms for an hour. The THD+noise was 0.00265% at the start; by the end of the hour, it had dropped slightly, to 0.00218%. The amplifier's heatsinks were way too hot to touch after 60 minutes, but despite the thermal abuse, the amplifier didn't turn itself off.

The amplifier was non-inverting from both its balanced and unbalanced inputs. The voltage gain into 8 ohms was 28.75dB from both inputs with the gain switch set to "29dB/1V," 22.9dB with it set to "23dB/2V." The input impedance was lower than specified, at 7.5k ohms unbalanced, 10.2k ohms balanced. This will result in a slightly lean bass with some tubed preamplifiers.

The output impedance was a very low 0.06 ohm at low and midrange frequencies, rising slightly to 0.13 ohm at 20kHz. The modification of the amplifier's frequency response by the Ohm's Law interaction between its source impedance and that of the loudspeaker will be minimal, therefore. This can be seen in fig.1, where the change in response of the amplifier with our standard simulated loudspeaker remained within ±0.1dB limits. The frequency response was flat up to 20kHz into 8 ohms, but the rising output impedance above the audioband resulted in an output down 0.4dB at 20kHz into 2 ohms. The –3dB point into 8 ohms lay at 120kHz; as a result, the amplifier's reproduction of a 10kHz squarewave into that load showed very short risetimes, without any overshoot or ringing (fig.2).

Fig.3 plots the THD+N percentage in the 28B-SST's output against its output power into 8, 4, and 2 ohms. The amplifier comfortably exceeded its 1000W/30dBW specification into 8 ohms, delivering no less than 1300W (31.15dBW) at 1% THD+N. (The wall AC voltage dropped from 125.1V to 120V at this power level.) Into 4 ohms, the Bryston clipped at 1800W (29.5dBW, 117.5V wall voltage),

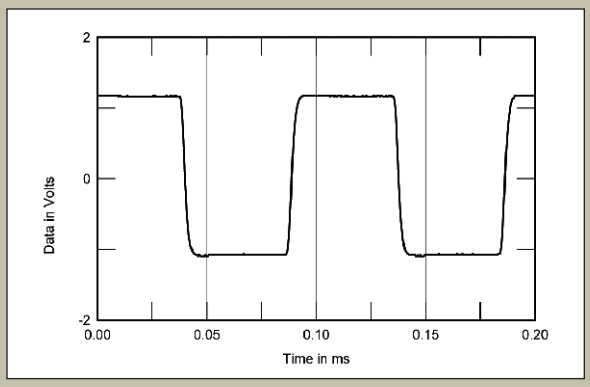

Fig.2 Bryston 28B-SST, small-signal 10kHz squarewave into 8 ohms.

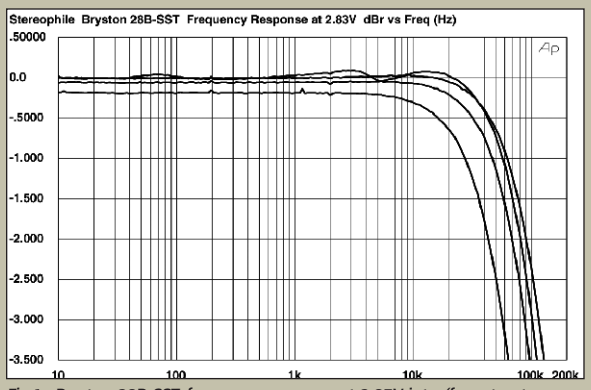

Fig.1 Bryston 28B-SST, frequency response at 2.83V into (from top to bottom at 2kHz): simulated loudspeaker load, 8, 4, 2 ohms (0.5dB/vertical div., right channel dashed).

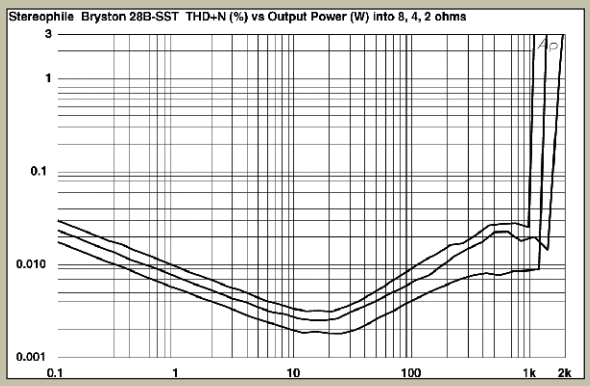

Fig.3 Bryston 28B-SST, distortion (%) *vs* 1kHz continuous output power into (from bottom to top at 1000W): 8, 4, 2 ohms.

rugged, the protection-circuit parameters are not as restrictive as are found in other amplifiers. Even so, the protection circuit is designed to handle most fault conditions, including shorts and DC offset.

Borrowed from earlier Bryston designs are the control circuit boards for power up, fault detection and logic, and LED display. As in other Bryston amps, all AC mains circuits are shielded from the audio circuits. The inrush current on power-up needed to charge the sixteen 10,000µF electrolytic capacitors is slowed from 18ms to 1.5 seconds by a microprocessor-controlled turn-on phase circuit. The 28B-SST's output stage uses 32 bipolar output transistors: eight PNP/NPN pairs on each side of the chassis, each set of eight controlled by a single pair of driver transistors. These power transistors—the large, fast types used in the 14B-SST—are said to be highly reliable. The output devices are hand-selected to ensure that their gains are matched.

Bryston publishes only the 28B-SST's maximum power output into 8 ohms; no ratings are offered for loads of 4 or 2 ohms. However, run into 4 ohm loads, with the rear-panel circuit breaker bypassed, the amplifier won't clip until it's continuously delivering 1800W. The resulting current flow will trip the 15-amp breakers in most homes after 10–20 seconds of continuous power. Chris Russell explained that, because regulatory agencies test an amplifier at its rated power under home conditions, for the 28B-SST Bryston chose a power rating into 8 ohms that would not trip the average home's circuit breaker.

Rugged construction

The 28B-SST's chassis continues Bryston's "thermal monolith" design, with 38 heat-radiating fins per side. The front panel is simple, with only an On/Off switch in its lower half, and a tricolor LED: it glows green when the 28B-SST is on, red when it's overloaded or distorting (detected by the 28B-SST's clip-sensing comparator circuit), or yellow-orange during thermal shutdown. All set-and-forget switches and controls are on the rear panel. These include an On/Off circuit-breaker switch at bottom left, accompanied by a small pilot light that can be seen when looking down on the amplifier from above. There are switches for power-up mode, external-trigger voltage turn-on options, and one that toggles between 0dB or +6dB gain. When the external trigger switch is set to Local, the 28B-SST ignores any external 4–12V turn-on signal, powering up only when the switch on the front panel is pressed.

The rear panel also has single-ended and balanced input connectors, and a switch to select between them. From the top down, there are: a Neutrik balanced input that can take either a balanced XLR plug (pin 2 hot) or a balanced, ¼" tip-ring-sleeve (TRS) phone plug (tip positive). Just below that are two red-and-blue five-way speaker-binding posts rated at 60A and designed to meet CE standards. Below them is an IEC mains socket for the detachable AC cord. Instructions clearly printed on the rear panel make it possible to set up the 28B-SST without having to refer to the supplied sheet.

The 28B-SST receives a torturous four-day burn-in at the factory consisting of a squarewave input signal driving the amplifier at full power into a capacitor. The driving signal is gated one hour on, one hour off, this cycle repeated many times. This heats, cools, then reheats the amp again and again; the resulting expansion and contraction are expected to reveal any loose connections, and to fatally stress any device prone to early failure. After

measurements, *continued*

though it couldn't maintain its high power into 2 ohms, delivering 1050W (24.2dBW, 116V wall voltage).

The downward slope of the traces below 10W in fig.3 indicates that the actual distortion lies beneath the noise floor at these levels, but the Bryston is also a low-noise design. The unweighted, wideband signal/noise ratio (ref. 1W into 8 ohms) was an excellent 81.5dB, this improving to 93.6dB when A-weighted. I plotted the manner in which the THD+N changes with frequency at a level of 12.65V, equivalent to 19.5W into 8 ohms, which is where the true THD starts to rise out of the noise. The results are shown in fig.4. The amplifier is superbly linear at all frequencies into 8 and 4 ohms, but is clearly less comfortable driving 2 ohms.

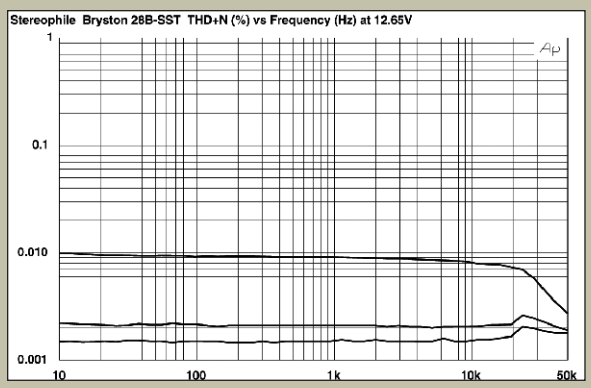

Fig.4 Bryston 28B-SST, THD+N (%) *vs* frequency at 12.65V into (from bottom to top): 8, 4, 2 ohms.

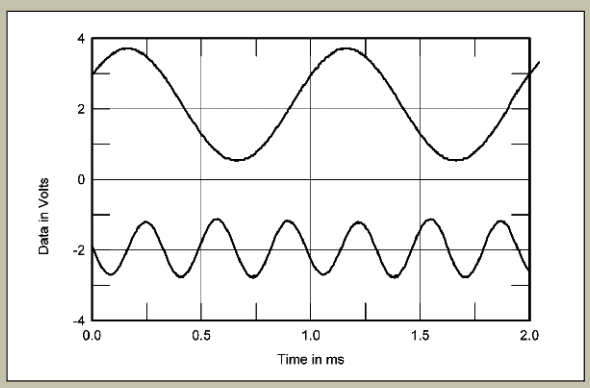

Fig.5 Bryston 28B-SST, 1kHz waveform at 92.5W into 8 ohms (top), 0.0065% THD+N; distortion and noise waveform with fundamental notched out (bottom, not to scale).

burn-in, each 28B-SST is again tested; those results are shipped with the unit.

Setup

The 28B-SST is the first Bryston product I've reviewed that has both front and rear handles, which made its 92 lbs relatively easy to move around. I placed the monoblocks one atop the other against the front wall, near my full-range loudspeakers. I plugged their detachable power cords into the rear-panel jacks of a Torus Power RM20 Power Isolation Unit (PIU). Bryston's James Tanner thought this would be an opportunity to demonstrate how a Torus PIU could provide the best current platform for the Bryston's sound.

Bryston's speaker binding posts are so well configured that it was a breeze to attach my Pure Silver Cable speaker cables, which are fitted with spade lugs. While being the requisite 19–25mm apart to meet European CE regulations, the posts are shrouded in plastic to prevent fingers from touching the metal contacts when the amplifier is playing.

I placed each of my three loudspeaker systems—Quad ESL-989s, Revel Ultima Salon1s, and Escalante Design Fremonts—46" from the front wall, 6' 10" apart, and 32" from each sidewall, toed-in to face my overstuffed listening chair 8' away, which places my ears 37" above the floor. My lightly damped room is rectangular, 26' long by 13' wide by 12' high, with a semi-cathedral ceiling. Behind my chair, the room opens into a 25' by 15' kitchen through an 8' by 4' doorway.

The 28B-SST's interior is dominated by the enormous toroidal transformer.

Sound

The Revel Ultima Salon1's relatively low voltage-input sensitivity (86dB/W/m) demands a lot of power to fill my listening room. Whatever the Revels demanded the 28B-SSTs delivered, without clipping or compressing. After driving the Revels at lease-breaking volumes for two or three hours, the Brystons' heatsinks were warm to the touch, but never got as hot as had Bryston's B100-DA 100Wpc integrated amplifier.

In the past, other Bryston amplifiers—the 4B-SST (Vol.22 No.10, Vol.24 No.10), the B100-DA (Vol.30 No.4), the 7B-SST (Vol.26 No.4), and the 14B-SST (Vol.25 No.11)—have been reported to be distortionless, clear, and neutral. But the 28B-SST also sounded sweet, delicate, and smooth—not at all what I expected from a 1kW solid-state monoblock.

At low power levels, or at higher powers into 8 ohms and above, the 28B-SST's distortion was almost pure third harmonic in nature (fig.5). The second harmonic made an appearance at higher powers into lower impedances (fig.6), but the Bryston is still very linear in absolute terms, and no power-supply–related components can be seen in this graph, suggesting that the supply is optimally designed for this high-powered an amplifier. Intermodulation distortion was also very low, even with the 28B-SST driving 1kW into 4 ohms (fig.7).

While it definitely works better with speakers having impedances of 4 ohms or greater, Bryston's 28B-SST joins that select group of very-high-powered amplifiers that have sufficiently low noise and distortion to reproduce high-resolution digital recordings without compromise.

—John Atkinson

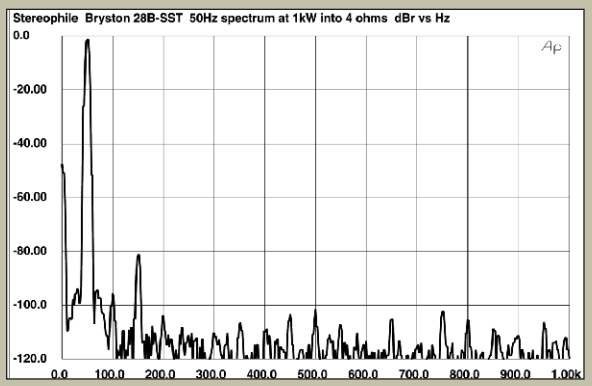

Fig.6 Bryston 28B-SST, spectrum of 50Hz sinewave, DC–1kHz, at 1kW into 4 ohms (linear frequency scale).

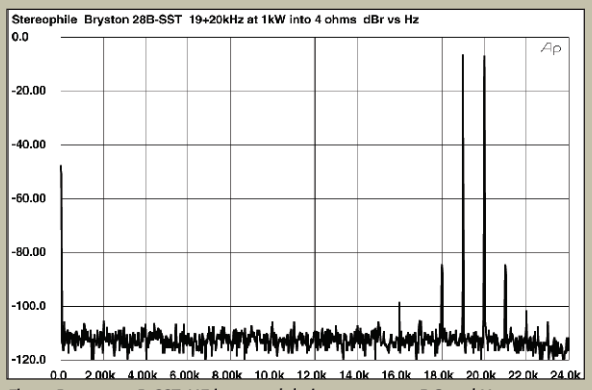

Fig.7 Bryston 28B-SST, HF intermodulation spectrum, DC–24kHz, 19+20kHz at 1kW peak into 4 ohms (linear frequency scale).

This is probably why Bryston's Chris Russell calls the 28B-SST the "best tweeter amplifier I've ever heard!"

That treble sweetness was first apparent to me when I used the 28B-SSTs to drive my Quad ESL-989s in a biamped setup with a pair of JL Audio Fathom f113 powered subwoofers (reviewed in September). I heard some delicate midrange and treble notes for the first time, such as from the acoustic guitars on Emmylou Harris' *Spyboy* (CD, Eminent EM 25001-2), and the upper range of Patricia Barber's voice on her *Café Blue* (CD, Premonition 21810 2). The same delicacy and sweetness were evident in the Brystons' reproduction of Steve Nelson's soft, translucent vibraphone on "The Mooche," from *Rendezvous: Jerome Harris Quintet Plays Jazz* (CD, Stereophile STPH013-2). The image of the softly playing vibes reached from the far left to the center of the soundstage in my room, and could be clearly discerned, even though Billy Drummond's drums were much louder. I could easily distinguish timbral shadings among Drummond's vintage cymbals, just as John Atkinson stated in his liner note for *Editor's Choice* (CD, Stereophile STPH016-2), on which this track also appears. At the beginning of "The Mooche," the 28B-SSTs also captured the Zildjian ride cymbal as a shimmering, metallic sound, not the soft, hissing static heard from lesser amplifiers.

The 28B-SST's midrange was just as sweet, clear, and open as its treble, and full of new musical information—all reminiscent of the triode mode of the VTL S-400 tube amplifier, which I used to review VTL's TL-6.5 preamplifier (Vol.30 No.6). Whether it was Natalie Merchant's dusky rendition of the title song from the *One Fine Day* soundtrack (CD, Columbia CK 69716), or Suzanne Vega's thin, reedy voice in "Tom's Diner," from her *Solitude Standing* (CD, A&M CD 5136), or the honey and whiskey voice of Diana Krall singing "Garden in the Rain," from her *Love Scenes* (CD, Impulse! IMPD-233), or Willie Nelson's slightly nasal sound in "Darkness on the Face of the Earth," from his *Teatro* (CD, Island 314-524 548-2), or the Turtle Creek Chorale in John Rutter's *Lord Make Me an Instrument of Your Peace*, from *Requiem* (CD, Reference RR-57CD), the Bryston 28B-SSTs delivered each singer's distinct vocal timbre. Whether it was the separation of voices in a massed choir, or the cut-from-solid-stone, three-dimensional image of a lone vocalist, these amplifiers created maximum emotional impact.

The 28B-SST rendered the brassiness of trumpets without adding irritation or edginess. The trumpets in Eiji Oue and the Minnesota Orchestra's recording of Stravinsky's *The Rite of Spring* (CD, Reference RR-70CD, tracks 21–24) had an attention-grabbing brassiness that added just the right amount of raw, hot, musical texture this work demands.

The 28B-SSTs' imaging was outstanding: a seamless, wall-to-wall soundstage. I was startled by the new information I heard, particularly the huge, deep soundstage of Stevie Nicks' "Silver Springs," from Fleetwood Mac's *The Dance* (CD, Reprise 46702-2). Nicks swayed closer to and then away from the microphone to add emotional impact to her vocals. Later, listening to David Hudson's *Didgeridoo Spirit* (CD, Indigenous Australia IA2003 D), I was engulfed in an Australian rainforest, complete with a soft rain falling, exotic birds calling, and wind rustling through the leaves. Orchestra Baobab's *Pirates Choice* (CD, World Circuit/Nonesuch 79643-2) transported me to a steamy Dakar nightclub for what the liner notes describe as "soothing, spell-binding, relaxed rhythmic grooves." I was particularly entranced by "Werente

TORUS POWER RM20 AUDIO/VIDEO POWER ISOLATION UNIT

When I arranged to review the Bryston 28B-SST, I wanted to be certain that the 1kW amplifier wouldn't be starved for current. Bryston advised me that Plitron, who manufacture the 28B-SST's toroidal transformer, also make Power Isolation Units (PIUs), under the brand name Torus Power. Torus explained that its PIUs combine surge suppression with massive toroidal transformers to provide AC power conditioning and protection from voltage surges.

For this review, I was supplied with Torus's RM20 ($3000), a PIU that uses a single 2400VA toroidal transformer to supply 120V and 20 amperes to the 10 AC outlets on its rear panel. It also has a 20A circuit breaker for its On/Off switch and uses a massive, 14AWG detachable AC cord rated at 15A/125V.

Torus PIUs use transformers twice the size found in typical amplifier power-supply toroids and buffer the amplifier's peak current demands. The PIU transformer's primary, attached to the home AC line, is decoupled from the secondary attached to the amplifier, allowing what is claimed to be a more complete attenuation of AC line noise, from 1kHz to over 1MHz. Torus PIUs also provide substantial surge suppression, and are available in either single 120V input or dual 120V (balanced) inputs.

Installation involved placing the RM20's 95-lb chassis where it would get adequate ventilation: atop my Velodyne DD-18 subwoofer. I then used all 10 of its AC jacks for my audio components. Not only did the PIU provide a central place to plug in all my audio gear, it helped me eliminate extra extension cords and other line-cord clutter.

My approach to listening tests borrowed heavily from Brian Damkroger's review of the Audience Adept Response line conditioner in April (Vol.30 No.4). Like BD, I found it easiest to hear the Torus PIU's benefits by removing it from the setup after having lived with it and the Bryston 28B-SSTs in my system for two months. The PIU greatly enhanced subtle details of tone, timbre, and imaging when dynamics were extreme or volume was loud. Removing the PIU shrank the soundstage, making my system sound flatter and less detailed. This was most evident when I listened to "Deeper Wells," from Emmylou Harris' *Spyboy* (CD, Eminent 25001-2). The massive synthesizer sounds that open the track dominate and obliterate the sounds of Harris' voice and any instruments. Reinserting the PIU in my system focused the sound of the churning, roiling synthesizer on a spot at the front and center of the soundstage, allowing me to hear Harris' voice and the drums separately, farther back in the stage.

I highly recommend the Torus Power PIU to increase any serious audiophile system's powers of musical resolution and imaging. *—Larry Greenhill*

Serigne," which placed the percussion on the left, a droning blend of singers on the right, and the main singer and a syncopated tenor sax in the center.

The 28B-SST provided fast, deep bass with good pitch definition, utterly devoid of overhang and midbass bloat. This proved just the ticket to showcase the Revel Ultima Salon1s' ability to reproduce the deep bass of pipe-organ music. Without the JL Audio subwoofers, I heard *and* felt the full impact of the thunderous, tight, crushing pedal notes at the end of John Marks' recording of Howells' *Master Tallis's Testament* (see "The Fifth Element," June 2007). The rumbling notes pressurized my room without bloat or excess, made the air shudder, and rattled loose objects. This also was heard in the *Allegro* of Widor's Organ Symphony 6, from Marcel Dupré's *Recital* (CD, Mercury Living Presence 434 311-2). *Gnomus*, from Jean Guillou's performance of his own transcription for organ of Mussorgsky's *Pictures at an Exhibition* (CD, Dorian DOR-90117), was reproduced with a mix of the shuddering bass notes and the delicacy of his large instrument's trumpets and pipes that recreated a sense of space and depth appropriate to the recording venue. I heard the smooth but powerful blend of male singers and organ-pedal chords in Rutter's *The Lord is My Light and My Salvation* (CD, Reference RR-57CD), but was still able to sense the space of the recording venue, a church.

Other low-register instruments, including bass drum, double bass, and synthesizer, all benefited from the 28B-SST's power and control. Double-bassist Glen Moore's plucked notes on "The Silence of a Candle," from Oregon's *Beyond Words* (CD, Chesky JD130), were rendered with distinct tonal steps, and were both taut and well damped. The huge bass drum and synthesizer in "Silk Road," from I Ching's *Of the Marsh and the Moon* (CD, Chesky WO144), seemed convincingly deep, resonant, and tuneful. I was startled by the explosive bass-drum beats in Herbert Owen Reed's *La Fiesta Mexicana*, from Howard Dunn and the Dallas Wind Symphony's *Fiesta!* (CD, Reference RR-38CD), which contrasted strongly with the shimmering, reverberating chimes that follow.

The 28B-SST's raw power was a revelation—clear, undistorted music played at rock-concert levels. The Escalante Design Fremont speakers hit 112dB peaks playing Lyle Lovett's foot-stomping gospel song, "Church," from *Joshua Judges Ruth* (CD, MCA MCAD 10475). This track's clean, tuneful, well-defined kick drum propelled the music like a steamroller—when it pulsed, the 28B-SSTs delivered with tremendous speed and no compression. Blady Blades' take-no-prisoners drum solo toward the end of "The Maker," from Emmylou Harris' *Spyboy*, erupted in huge, explosive tom-tom, kick-, and snare-drum notes that remained intact, exact, and clear, even at top volumes. Explosive piano scales erupted from dead-black silence in the "The Hand-Off," from the *Sneakers* soundtrack (CD, Columbia CK 53146). The opening timbales solo in "Tito," from Arturo Sandoval's *Hothouse* (CD, N2K 10023), exploded in gunfire-like rim shots, even though I could still clearly hear subtle changes in drumhead tonalities during the crescendo.

The 28B-SST's reproduction of HUGE dynamic contrasts in synthesizer recordings was accompanied by an ability to reveal emotionally evocative musical details. The oppressive bass pulsations in A3's "Woke Up This Morning (Chosen One Mix)," aka the main theme of HBO's *The Sopranos* (CD, Play-Tone/Columbia/Sony Music Soundtrax 63911), conveyed Tony Soprano's desperation and blind anxiety. In the excerpt from Strauss's *Also sprach Zarathustra* in Terry Dorsey's electronic composition *Ascent*, from his *Time Warp* (CD, Telarc CD-80106), the Brystons communicated a dense, fearful dawn via a deep, rumbling, sustained 32Hz note from Dorsey's synthesizer.

THE **28B-SST'S** REPRODUCTION OF HUGE DYNAMIC CONTRASTS IN SYNTHESIZER **RECORDINGS** WAS ACCOMPANIED BY AN ABILITY TO REVEAL EMOTIONALLY **EVOCATIVE** MUSICAL DETAILS.

Summing up

At $16,000/pair, the Bryston 28B-SST is a serious investment for any audiophile. But for those with large listening rooms and speakers of low voltage sensitivity and 4–8 ohms impedance, the Bryston's price and 1000W power rating compare well with those of other high-end, solid-state monoblocks. It combines the top-end delicacy and sweetness of my Mark Levinson ML-2 class-A solid-state amplifier with the raw bassmaster capabilities of a Bryston 4B-SST or 14B-SST. In many ways—high power output, monoblock flexibility, basically wireless construction, reliability, stability, and 20-year warranty—the 28B-SST is one of the most outstanding amplifiers at any price. Come to think of it, the 28B-SST is just the right amplifier to capture the raw power, passion, sonorities, and subtle inner details of Golijov's *Azul*, should a recording of the work ever be released. I can't wait.

ASSOCIATED EQUIPMENT

ANALOG SOURCES Linn Sondek LP12/Lingo turntable, Linn Ittok tonearm, Spectral moving-coil cartridge; Day-Sequerra Classic FM tuner.
DIGITAL SOURCES Krell KRC-28 CD player, Sony SCD-C555ES multichannel SACD/CD player, Slim Devices Squeezebox network music player.
PREAMPLIFICATION VTL TL-6.5, Krell KCT preamplifiers; Bryston 10B-Sub electronic crossover.
POWER AMPLIFIERS Mark Levinson No.334, Krell FPB-600c, VTL S-400.
D/A INTEGRATED AMPLIFIER Bryston B100-DA.
LOUDSPEAKERS Quad ESL-989, Revel Ultima Salon1, Escalante Design Fremont; JL Audio Fathom f113 subwoofer.
CABLES Digital coax (75 ohm): Wireworld Silver Starlight. Interconnect: Pure Silver Cable balanced, Red Rose Silver One, Totem Acoustic Sinew, Krell CAST, Mark Levinson Silver (single-ended), Bryston (balanced). Speaker: Mark Levinson HFC-10, Pure Silver Cable R50 biwire double ribbon, Ultralink Excelsior 6N OFHC, Coincident Speaker Technology CST 1.
ACCESSORIES Torus Power RM20 Power Isolation Unit, ATI SLM 100 analog sound-level meter.

—Larry Greenhill