

**BRYSTON**

**20-YEAR WARRANTY**  
*Unlimited, unprecedented, unequalled*



## The Briston SST Series

*Modular amplification  
for stereo, home theater,  
and professional applications*

**40<sup>th</sup>**  
ANNIVERSARY



# Introducing the SST Series

## OUR GOAL

For 40 years, Bryston has had a continuing commitment to design and manufacture the most accurate and reliable audio electronics. The performance, value, and reliability of our amplifiers, and our unrivaled 20-year warranty, have brought us recognition in the world of pro audio, as well as with reviewers and home users. But there is no product that cannot be made better. To this end, we maintain an extensive research and development program, constantly investigating techniques, technologies, and devices that promise improvements to all aspects of our amplifiers. The Bryston SST Series is the direct result of this on-going quest, and represents a significant step forward in the art and science of audio amplification.

## PERFORMANCE WITHOUT COMPROMISE

With today's increased clarity and dynamic range in recordings and movie soundtracks, you need equipment that not only equals, but surpasses, the parameters of the

most demanding material available. The SST Series is without peer in meeting this performance challenge.

## WHAT WE'VE DONE

Among the advances included in this new SST Series are: faster, more linear and more reliable output transistors for better high frequency accuracy; doubled filter capacitance for even deeper and better-controlled bass; a new proprietary grounding protocol which eliminates the need for ground-lift switches and reduces system noise; and a new computer-modeled heatsink profile for cooler operation and longer component life. Modular design and separate power supplies for each channel ensure cross-talk is essentially nonexistent, and provide precise and focused soundstaging. Components mount directly into glass-epoxy circuit boards, eliminating variations in signal travel and wire interaction. Reviewers agree: sound quality is improved to a stunning degree, realizing a higher, and far



**Modular design with independent power supplies each with its own transformer for precise sound-staging.**

Above Bryston model 6B SST 3-channel amplifier



**"Electronic" front panel membrane power switch (no moving parts); rear panel toggle power switch doubles as circuit breaker reset (no fuses)**

# Sonic Superiority by Design

more consistent standard of musical accuracy across a line of amplifiers than ever before possible.

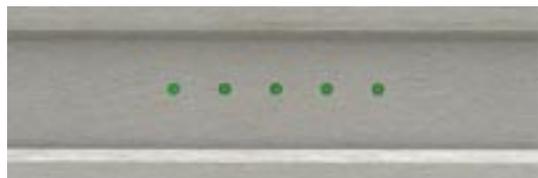
## DESIGN PHILOSOPHY ENSURES SONIC SUPERIORITY

From input to output, all the circuitry in the SST Series of amps has been optimized for the most accurate performance possible. All analog signal circuitry is fully discrete to avoid the compromises, phase shift, and non-linearities inherent in IC's. The Bryston SST Series amplifiers incorporate an innovative gain stage topology, which yields a substantially lower noise floor through the use of low-impedance pathways within the amplifier, and has strong advantages in reducing overall distortion. Bryston's computer controlled distortion analyzers confirm that IM distortion of less than 10 parts per million (below 0.0009%) are typical for this new circuitry. All SST amplifiers use Bryston's proprietary output stage, which we call "Quad-Complementary." The Quad-Complementary topology improves linearity to a new standard of accuracy, while virtually eliminating aggressive higher harmonic distortion

products. The overall harmonic distribution of Bryston's Quad-Complementary output stage closely approaches an ideal Class-A output, except that the overall distortion is actually much lower. (True class-A output stages suffer from relatively high current-induced distortion levels, consisting of mostly lower-order harmonics). The listening characteristics display a high degree of transparency without harshness or grain. The annoyances previously ascribed to 'transistor sound' are absent, and the amplifier seems to combine the seductive lushness of tube equipment with the focus and accuracy of solid-state.

## MODULAR DESIGN/INDEPENDENT POWER SUPPLIES:

No matter how good an amplifier's signal path may be, it's meaningless if it's starved in the power supply, an all too common way of cutting costs. One of the things that makes the Bryston SST Series unusual is our insistence that every amplifier in the line have a completely separate and independent power supply for each channel, including its own toroidal transformer.



**Power LEDs on the front panel indicate each channel's functional status – green for power-on, red for overdrive.**

Above LED indicators on Bryston 9B SST THX 5-channel amplifier.



**Quick-connect 12 Volt trigger input allow remote on/off triggering of your amplifier(s).**

Above Bryston SP 1.7 Processor can provide on/off trigger signal for all Bryston SST amplifiers.

# The SST Series: A Full Range of Serious Amplifiers for Serious Listeners

The Bryston SST Series offers a variety of channel and power options, but all amplifiers meet SST performance specifications and have the full range of SST features. Consult the charts within this section to learn more about the SST Series, then select the amplifier that best meets your needs.

## Channel Configuration & Power Output of Bryston SST Amplifiers

Power Output

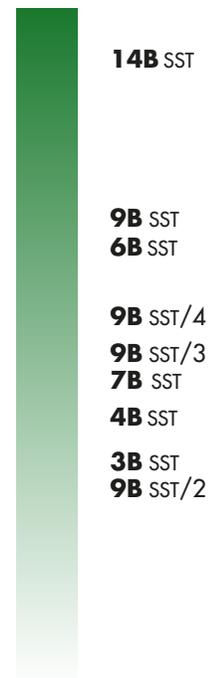
W/channel into 8 Ohms	120W	600W
W/channel into 4 Ohms	200W	900W

●	1-Channel				<b>7B SST</b>
● ●	2-Channel	<b>9B SST/2</b> [2 modules]	<b>3B SST</b>	<b>4B SST</b>	<b>14B SST</b>
● ● ●	3-Channel	<b>9B SST/3</b> [3 modules]		<b>6B SST</b>	
● ● ● ●	4-Channel	<b>9B SST/4</b> [4 modules]			
● ● ● ● ●	5-Channel	<b>9B SST</b> [5 modules]			

### FEATURES *Applicable to all SST amplifiers*

- Front panel membrane power switch
- Toggle power switch on rear panel
- No fuses; protected by resettable circuit breaker
- Soft-start circuit on power up
- Modular construction
- Quad-Complementary output stage
- Multiple filter capacitance per channel
- Independent power supply for each channel
- Robust pro audio construction
- Audiophile sound quality
- Selectable external power-up
- Quick-connect remote 12V power trigger input
- Delayed output on trigger
- Selectable gain settings for each channel
- Balanced and single-ended inputs
- Choice of XLR or 1/4" phone jack for balanced input
- RCA jack for single-ended inputs
- Channel status LED indicators
- Option of 17" shelf mount or 19" rack mount panels
- Rack mount versions include handles
- Option of silver or black faceplate
- UL, CE, and CSA approved
- Available for 100V, 120V, or 240V power
- 20-Year Unlimited Warranty

### SST Series Price Gauge



## 7B SST

The 7B SST single-channel amplifier employs a balanced-output design that reduces THD and IMD to unprecedented low values (typically 0.001% or less) . With a low noise floor (typically below -118dB) and excellent signal tracking characteristics (slew rate of 120 Volts per microsecond), the 7B SST monoblock assures a new degree of transparency, musicality, and ease of listening. Capable of delivering 900 Watts continuously into 4 Ohms, and with tremendous power reserves, the 7B SST offers virtually perfect freedom from overload on any type of speaker or music.



*The 7B SST is also available in a special version for very low impedance loads, i.e., 3 Ohms and below.*

 Single-channel (mono-block) amplifier

*Illustration PMC model IB1*

**900W** into 4 Ohms

**600W** into 8 Ohms

**One advantage of the 7B SST's Monoblock design is that it allows you to place the amplifier adjacent to the loudspeaker, providing improved performance through lower cable resistance.**



*Illustration PMC model MB2*

## 14B SST

Probably the best value "esoteric" high power 2-channel amplifier on the market today, the 14B SST is basically a pair of 7B SST amplifiers on a single compact chassis. Its superbly low noise floor yields an inky black silence between notes for hauntingly realistic reproduction. As a dual mono modular design, it has the power to drive, with breath-taking ease and clarity, speakers which have been considered "impossible" loads in the past.



 Dual-channel (stereo) amplifier

*Illustration PMC model IB1*

**900W** into 4 Ohms

**600W** into 8 Ohms

*The 14B SST is also available in a special 120 Volt 20 Amp version (requires a dedicated 20 Amp AC outlet).*

# Reliability & Support

## BUILT TO LAST

The techniques and custom materials that Bryston brings to bear every day in the construction of audio equipment are more typically found in industrial plants building military and aerospace electronics. Our traditional adherence to proprietary parts, sophisticated construction techniques, and in-depth testing prevents the unit-to-unit variability typical of mass produced product and assures that your amplifier will perform for many years without concern.

## HAND ASSEMBLED WITH CARE:

All audio products we make are hand assembled and individually tested by a dedicated team of Bryston employees in our own North American manufacturing facility.

## UNIQUE BURN-IN PROCEDURE

Each and every Bryston audio product undergoes an extensive quality control “burn-in” procedure. Following a complete operational checkout, every amplifier is placed on a test-bench and run for 100 hours at full output (one-hour on/one-hour off for additional thermal stress), with a high

frequency square-wave input and a capacitive load. This extremely rigorous burn-in quickly “matures” components and weeds out any potential premature failures. The result is reliable trouble-free performance for many years.

## EASY SYSTEM UPGRADES

We’ve designed the SST Series to take into account that systems change. There’s a full range of channel and power options, several amplifiers may be operated in bridged mono mode, and the 9B SST THX may be ordered with as few as 2 channels, and later expanded up to 5 channels.

## ON-LINE CUSTOMER SUPPORT

The Bryston website allows for downloading of technical bulletins, product addenda, and complete user manuals.

## OUR 20-YEAR WARRANTY

Our commitment to build-quality and quality assurance is fully why every product we manufacture features an unlimited, transferable 20-Year Warranty, a warranty that remains unequaled by any other audio manufacturer in the world.



**Input flexibility: XLR or 1/4" phone jack for balanced signals and RCA jack for single-ended source; input gain is selectable.**

*Above left to right Model 4B SST input connectors, balanced/single-ended switch, and (Pro model only) input gain adjustment.*



**As Bryston makes a great many of the amplifiers found in professional studios and concert venues, we make all amplifiers available in standard 19" rack mount configuration with handles, as well as the 17" shelf-mount version preferred by many consumers. Either size aluminum front panel may be ordered in a silver or black finish.**

*Above (clockwise from top left) 9B SST 17" version, black finish; 9B SST rack mount, silver; 3B SST 19", black; 3B SST 17" silver, black.*

# Solid Construction

Bryston's research has shown that separate power supplies provide the best imaging, clarity, and dynamic range — all attributes that are especially crucial given the emerging and demanding high resolution digital sources. The power supplies employ multiple filter capacitors per channel, rather than single pairs of larger filter cans, allowing improved high frequency response, and reducing overall losses in the supply. In the 9B SST, and 6B SST models we carry the modular concept further, making the channels removable.

## SUPERIOR INGREDIENTS

We use only the finest components — such as 0.1% metal-film resistors, polypropylene capacitors, custom-wound toroidal transformers, and hand-matched transistors — to reduce noise and distortion to the absolute minimum. Gold-plated balanced or single-ended (RCA) input connectors are standard as well as gold-plated 5-way loudspeaker binding posts, to eliminate possible causes of distortion from corrosion. As befits products intended for use on stage as well as in the home, the SST chassis are extremely robust.

## FLEXIBILITY & FEATURES

SST amplifiers offer feature flexibility. For example, all allow a choice of input connection — balanced XLR-F, balanced 1/4" phone, or single-ended RCA jack — together with a switch to select gain settings. A trigger input allows system-wide on/off control. Overall, the SST Series itself facilitates flexibility in putting together the total system through a variety of channel and power output options.

## THE RESULT

Although the description of circuit innovations can indicate the research and commitment we bring to the design and manufacturing of our products, it's not the whole story. The purpose of all this technology is to place you within the scene of the movie, or to transport you to the actual musical event. Whether you can experience all the drama, movement, and emotions intended is the one truly meaningful measure of any audio/video system. Take the time to visit your Bryston dealer and audition our SST Amplifiers. We think that you'll rediscover how exciting audio can be.



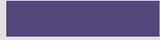
**Flexible choices in numbers of channels and power ratings allow a wide range of options.**

Two ways of tri-amplifying. *Above Left* a single 6B SST 3-channel amplifier delivers 300 Watts to each driver. *Right* Three mono-block 7B SST amps offer 600 Watts per driver. Speaker: PMC IB1.



Dual-channel (stereo)  
amplifier

Illustration PMC model IB1



**500W** into 4 Ohms  
**300W** into 8 Ohms

## 4B SST

The Bryston 4B is something of a legend. As our most popular model, it has attained international status as an amplifier suitable for the finest and most sophisticated sound systems. In its latest incarnation, the 4B SST, it is a dual mono design delivering 500 Watts per channel into 4 Ohms. Whatever the venue, be it recording studio, concert stage, broadcast facility, home theater installation, or state-of-the-art stereo system, the 4B SST continues as the number one choice.



The 4B SST may also be operated in bridged mono, providing 900 Watts into 8 Ohms



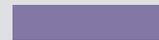
## 3B SST

The 3B SST stereo amplifier, at 150 Watts per channel, provides all the sonic virtues and the same high value as our more powerful 4B SST but in a package which is both compact and less costly. Historically, the 3B has found favor in a wide range of audio/video systems which call for only moderate amounts of power but wish to avoid sacrificing sonic accuracy and long-term reliability.



Dual-channel (stereo)  
amplifier

Illustration PMC model IB1



**250W** into 4 Ohms  
**150W** into 8 Ohms



The 3B SST may also be switched to bridged mono, providing 400 Watts into 8 Ohms

**SPECIFICATIONS** *Applicable to all SST amplifiers*

Distortion	< 0.005% from 20Hz to 20kHz at rated output into 8 Ohms
IM or THD+noise	< 0.007% from 20Hz to 20kHz at rated output into 4 Ohms
Noise	(Measured with input shorted; 20Hz. to 20kHz.) >110dB below rated output @ 29dB gain (-75dBu) >113dB below rated output @ 23dB gain (-78dBu) >116dB below rated output @ 17dB gain (-78dBu)* <small>*setting available on models 6B &amp; 9B only</small>
Slew rate	Greater than 60 volts per microsecond
Power bandwidth	From less than 1 Hz to over 100 kHz
Damping factor	Over 300 at 20 Hz, ref. 8 Ohms
Input Impedance	50kOhms single-ended, 20kOhms balanced

**GAIN & SENSITIVITY**

	<b>7B SST</b>	<b>14B SST</b>	<b>4B SST</b>	<b>3B SST</b>	<b>6B SST</b>	<b>9B SST THX</b>
1 Volt setting	29dB; 2.3V	29dB; 2.3V	29dB; 2.3V	29dB; 1.3V	29dB; 1.5V	29dB; 2.3V
2 Volt setting	23dB; 4.6V	23dB; 4.6V	23dB; 4.6V	23dB; 2.6V	23dB; 3.0V	23dB; 2.2V
4 Volt setting	—	—	—	—	17dB; 6.0V	17dB; 4.4V

## 6B SST

The Bryston 6B SST provides three channels of powerful amplification in a single chassis. Consisting of three totally independent amplifier modules, each with its own power transformer and power supply, each audio channel will supply effortless power even to the world's most demanding loudspeakers. The 6B SST is a convenient solution for home theater left-center-right amplification and is also a great way of tri-amplifying 3-way loudspeakers.



3-channel amplifier

*Illustration PMC models IB1 & IB1C*



**500W** into 4 Ohms  
**300W** into 8 Ohms



**3- position sensitivity switch: 1V, 2V, or 4V**



**Polarity switch on each channel**

## 9B SST THX

The Bryston 9B SST THX is a modular, 5-channel, single-chassis power amplifier delivering 200 Watts per channel into 4 Ohms. The 9B, however, is unique among SST amps — although it also employs modular construction in which each channel is self-contained with audio circuitry, connectors, and an independent power supply, the 9B channel module differs in that it is built on its own removable assembly. This means that not only may any channel be easily swapped in the unlikely event of failure, but also that the 9B may be configured with fewer channels if an application so requires. Indeed, the 9B SST THX may be also ordered in 2, 3, or 4 channel versions; channel boards are available separately for latter expansion. (For additional flexibility, any two of the channel modules in a 9B may be run in bridged configuration with an accessory cable.) Designed primarily for home theater applications, the 9B SST is THX certified, easily meeting and exceeding all parameters of the THX standards.

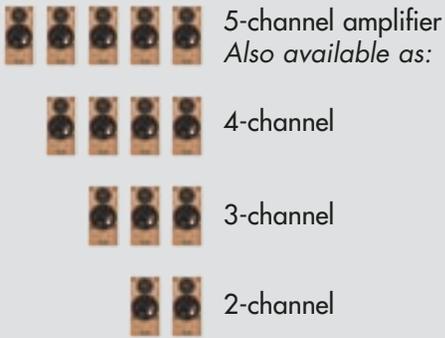


Illustration PMC model TB-2

**200W** into 4 Ohms  
**120W** into 8 Ohms



**3-position sensitivity switch: 1V, 2V, or 4V**



**Polarity switch on each channel**



**Certified THX**



**Removable modular channels each delivering 120 Watts @ 8 Ohms**

All SST amplifiers are available in "PRO" versions which include individual rotary gain trim on each channel.

	7B SST	14B SST	4B SST	3B SST	6B SST	9B SST THX
19in./48.3 cm wide rack mount version (with handles)	19 x 5.25 x 12.55 in. 48.3 x 13.3 x 32 cm	19 x 7 x 19 in. 48.3 x 17.75 x 48.3 cm	19 x 5.25 x 17.25 in. 48.25 x 13.3 x 43.8 cm	19 x 5.25 x 12.5 in. 48.3 x 13.34 x 32 cm	19 x 7 x 20.5 in. 48.3 x 18 x 52.1 cm	19 x 5.25 x 19 in. 48.3 x 13.33 x 42 cm
Mounted rack depth	11 in./28 cm	18 in./46 cm	15.75 in./40.1 cm	11 in./28 cm	18.4 in./46.7cm	17 in./43.2 cm
17in./43.2 cm wide shelf mount version (without handles)	17 x 5.25 x 11 in. 43.2 x 13.3 x 28 cm	17 x 7 x 19 in. 43.2 x 18 x 48.5 cm	17 x 5.25 x 15.75 in. 43.2 x 13.33 x 40.1cm	17 x 5.25 x 11 in. 43.2 x 13.3 x 28 cm	17 x 7 x 19 in. 43.2 x 18 x 48.3 cm	17 x 5.25 x 17.5 in. 43.2 x 13.3 x 44.5 cm
Approx. weight	50 lbs/22 kg	85 lbs/38.5 kg	42 lbs/18 kg	40 lbs/18 kg	80 lbs/36 kg	65 lbs/29.5 kg

Power and heat specifications for studio designers, architects and custom installers

	7B SST	14B SST	4B SST	3B SST	6B SST	9B SST/5
<b>Max. power consumption</b>						
At idle — Watts	125 Watts	220 Watts	160 Watts	90 Watts	225 Watts	220 Watts
At rated output into 4 ohms or 8 ohms — Watts	1980 Watts	4200 Watts	2100 Watts	1096 Watts	3450 Watts	2295 Watts
<b>Max. heat dissipation</b>						
At idle — BTU/hr.	426 BTU/hr.	750 BTU/hr.	545 BTU/hr.	307 BTU/hr.	770 BTU/hr.	750 BTU/hr.
At rated output into 4 ohms or 8 ohms — BTU/hr.	3684 BTU/hr.	8190 BTU/hr.	3890 BTU/hr.	2057 BTU/hr.	6600 BTU/hr.	4420 BTU/hr.

# Systematically better.



## Typical SST-Based Stereo and Home Theater System Configurations

System Power				
WATTS	<b>2</b> STEREO	<b>5.1</b> CHANNEL	<b>6.1</b> CHANNEL	<b>7.1</b> CHANNEL
SST	7B SST (x2)	7B SST (x5)	7B SST (x6)	7B SST (x7)
	14B SST	7B SST (x3)+14B SST	14B SST (x3)	14B SST + 6B SST + 4B
	4B SST	14B SST + 6B SST	14B SST + 4B SST (x2)	4B SST (x2) + 6B SST
	3B SST	4B SST + 6B SST	6B SST (x2)	4B SST + 9B SST
		4B SST + 9B SST-3	6B SST (x2)	4B SST + 9B SST
	3B SST	4B SST + 9B SST-3	4B SST + 9B SST-4	3B SST + 9B SST
		9B SST	3B SST + 9B SST-4	3B SST + 9B SST

Illustrations PMC floorstanding loudspeaker model FB1 with models TB2, and TB2C loudspeakers and TLE1 Active Subwoofer

## Examples of SST-Based Stereo and Home Theater System Upgrade Paths

### A Two-Step Stereo Upgrade

### Going from Stereo to Home Theater

**1**

Each channel of stereo 3B SST amp drives a small monitor loudspeaker full range.

**1**

Stereo 4B SST amp drives left and right loudspeakers

**2**

A second 3B SST is added; each amp is relocated adjacent to a loudspeaker, one channel driving the woofer, the other, the tweeter.

**2**

ILLUSTRATIONS  
Above left: PMC LB1 loudspeaker. Left: PMC model IB1.  
Right: PMC IB1 & IB1C with TB2 for rear channels. This system would also use a PMC Subwoofer (not shown).

**3**

Larger loudspeakers replace the monitors for more bass; the 3B SSTs are switched to bridge mode for more power; each amp remains adjacent to the loudspeaker, but now drives the system full range.

New 3-channel 6B SST amp drives the original left-right speakers and a new center channel speaker; the original 4B drives new rear channel speakers.

# Our 20-Year Warranty

In a world where most things seem to need frequent upgrading, repair, or replacement, how can Bryston offer a comprehensive, unconditional, and fully transferable 20-year warranty on every audio product we make?

The answer would quickly become apparent if you were to tour Bryston's plant in Peterborough, Ontario, Canada. State-of-the-art design facilities, with the latest CAD and circuit simulation software, and an inventory of some of the best and most reliable parts on the planet, combine with a manufacturing philosophy that eschews the artifacts of mass production — robots, moving assembly lines, and, frankly, shortcuts. Every Bryston audio component is handcrafted by people who take great pride in building the very best. Starting with a bare circuit board, for example, each component is hand selected and installed, every wire is cut and bent by hand, every connection is hand soldered. On average, it takes thirty to thirty-five person-hours to assemble a single Bryston product. Is this just some romantic 19th-century notion of the artisan-craftsman, or is there a real benefit to you, the consumer? There is. Take the hand soldering, for example. We could do the job much faster by employing wave-soldering machines as many companies do. But that would mean exposing the entire circuit board to a molten-metal bath, a source of extreme heat shock that could result in long-term reliability problems.

We don't skimp on testing or rush our

products through some last-minute go/no-go check; at every stage individual parts, completed circuit-boards, sub-assemblies, and final assemblies are all put through rigorous inspection and testing procedures. When completed, every Bryston amplifier receives a comprehensive and carefully documented test of all its functions, and the printed results of this computer-aided analysis are actually packed and shipped with each unit. During this intensive procedure, we not only reject any product that falls outside of our advertised specifications, but also any not meeting an even narrower band of specifications that we use for internal testing. As a result, you can expect each Bryston product to perform as least twice as well as the advertised specifications.

Our 20-year warranty drives us in a different direction from the typical manufacturer. We consider a Bryston product to be a mutual investment: by you, in an amplifier of lasting quality, and by us, in that we invest in the quality of the product in order to be secure in offering our warranty. It simply makes good economic sense to produce the very best products we can.

As a result, it can be said that we don't just make amplifiers — we also make friends — extremely satisfied customers who become life-long evangelists for Bryston's philosophy and tell their friends about our products. And, after all, who wouldn't want to give such nice friends a 20-year warranty?

**40<sup>th</sup>**  **ANNIVERSARY**

*Canada's largest independent manufacturer of high-end audio electronics for consumers and professionals. Founded 1962. Visit our website:*

**[www.bryston.ca](http://www.bryston.ca)**

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*Unlimited, unprecedented, unequalled*