BRYSTON 28B SST



1000 WATT MONO AMPLIFIER **BEYOND EXPECTATIONS** 

# INTRODUCING THE 28B SST MONO AMPLIFIER

#### **OUR MISSION**

To design a state of the art 1000 watt power amplifier that does not compromise performance at 1/10th power.

A significant part of the design criteria for the 28B SST was to develop a very powerful amplifier that would drive any speaker on the planet but maintain an ideal power curve at 1 watt as well as at 1000 watts and every power level in between. Most amplifiers exhibit a power curve whereby the best noise floor, drive capability and distortion is maintained from about 1/3 power and up.

The Bryston 28B-SST Mono amplifier maintains its power curve right from the first watt. This results in a BIG POWERFUL amplifier that sounds incredibly detailed and musical at very low levels and maintains that same sophistication and drive capability with even the most difficult, inefficient speakers, large or small.

The Bryston 28B-SST is a fully balanced output amplifier (BRIDGED), which has reduced THD and IMD to unprecedented low values, (typically 0.001% or less), for a new degree of transparency, musicality and ease of listening. Superbly low noise floor, typically below – 115dB, yields an inky black silence between notes for hauntingly realistic reproduction. Tremendous power reserves give the 28B-SST virtually perfect freedom from overload on any type of speaker or music, bringing the performance and realism

directly into your listening environment. The 28B's ability to resolve subtle musical details has to be heard to be believed – it truly sets a new standard: Mission accomplished.

#### **FEATURES**

- Selectable input balanced (xlr) or single ended (rca)
- Selectable gain 1v = 29db or 2v = 23dB
- External power on off control 12v trigger
- New micro controlled soft start
- New power switch
- All A/C is totally shielded from Audio circuits
- Maintains exceptionally low noise and distortion from very low to very high power demands

#### **HEAT SINKS**

The Bryston 28B-SST employs a total new computer modeled heat sink design maximizing heat dissipation for long-term "fan-free" operation into the most demanding speaker loads.

## **POWER SUPPLY**

The Bryston 28B-SST is a single channel mono block power amplifier capable of delivering over 1000+ watts of power. To provide this power the 28B POWER SUPPLY utilizes a 2000 VA custom power transformer, with 120,000 uf of filter capacitance, supply rails of +/- 90v. The component layout has been optimized so power path lengths are very short, and all wire has been eliminated after the power transformer.



2000 VA Power Supply



Heatsink Design Maximizing
Heat Dissipation For Long-Term
"Fan-Free" Operation

# SONIC SUPERIORITY

#### UNIQUE BURN-IN PROCEDURE

Each and every Bryston product undergoes a very extensive "burn-in" procedure. Following a complete operational checkout, every amplifier is placed on a test-bench and cycled on and off at one hour intervals for 4 days at full output. 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, and is backed by Bryston's exclusive 20-year full warranty.

#### HAND ASSEMBLED WITH CARE:

Bryston hand assembles and individually tests each and every product we manufacture. We exclusively use only the finest components in our amplifier designs, such as 1% and 0.1% metal-film resistors, polystyrene capacitors and hand selected and matched transistors to reduce noise and distortion to the absolute minimum. Bryston applies techniques and employs custom materials in our everyday construction of electronic equipment that are more typically utilized in military and aerospace industries. Our traditional adherence to proprietary parts and sophisticated construction and testing techniques guarantees your amplifier will perform for many years without concern. It also prevents any unit-to-unit variability, which inevitably is the result of any mass produced product.

# DESIGN PHILOSOPHY ENSURES SONIC-SUPERIORITY

- All analog signals are delivered by fully discrete components.
- All critical transistors are closely matched.
- All capacitors are selected for long life.
- All audio connectors are gold plated, to be trouble free.

## PERFORMANCE WITHOUT COMPROMISE

With today's increased clarity and dynamic range in recordings and movie soundtracks you need equipment that not only equals, but also surpasses the parameters of the most demanding material available. The Bryston 28B-SST Mono Block Amplifier is without peer in meeting this performance challenge.

### THE CONSEQUENCE

Obviously the goal of all this technology is to transport you to the scene of the movie or the location of the musical recording. Experiencing all the drama, movement and emotions intended is the one and only true measure of any audio/video system. We know you will agree the Bryston 28B-SST Mono Amplifier provides you with an open window on the musical experience. If your requirements are for sonic excellence in both analog and digital formats without compromises in performance, value and reliability look no further than the Bryston 28B-SST Mono Amplifier.



Remote 4-12 Volt
Power Trigger Input



New Push on/off Power Switch

# 28B SST TECHNICAL SPECIFICATIONS

#### DESCRIPTION

The 28B-SST is a powerhouse balanced mono amplifier providing a minimum of 1000-watts at 8-ohms.

#### **POWER OUTPUT**

1000 watts into  $8\Omega$ 

#### GAIN (SENSITIVITY) SELECT

1V setting = 29dB of gain = 100 watts @ 8  $\Omega$  3.2V =1000 Watts @ 8 $\Omega$ 

2V setting = 23dB of gain = 100 Watts @  $8\Omega$  6.4V=1000 Watts @  $8\Omega$ 

#### INPUT IMPEDANCE

Single ended:  $30K \Omega$ Balanced:  $60K \Omega 30K$  each leg

#### DISTORTION IM OR THO+NOISE

< 0.005% 20Hz to 20kHz at 1000 watts into  $8\Omega$ 

# NOISE

Measured with input shorted - 20Hz to 20 kHz. >110dB below rated output 29dB gain (- 75dBu) >113dB below rated output 23dB gain (- 78dBu)

# **SLEW RATE**

> 120 volts per microsecond

#### POWER BANDWIDTH

< 1 Hz to over 100 kHz

#### **DAMPING FACTOR**

Over 500 at 20 Hz, ref. 8 ohms

# **DIMENSIONS:**

Maximum dimensions for 19"w version with handles 48.3 x 20.5 x 52.1cm (19"w x 8.05"h x 20.525"d)

#### **WEIGHT:**

Approx. 42 kg - 92 lbs

#### **POWER CONSUMPTION & HEAT LOAD**

Power consumption at Idle  $\approx 215$  Watts Max. heat dissipation at idle  $\approx 733$  BTU/Hr.

Power consumption @ 1000W output into 8 ohms  $\approx$  1486 Watts Max. Heat dissipation @ 1000 Watts output into 8 ohms  $\approx$  1658 BTU/Hr.

Maximum power output at onset of clipping into  $8\Omega \approx 1300$  Watts Power consumption at 1300 Watts output into  $8\Omega \approx 2640$  Watts Max. heat dissipation @ 1300 Watts output into  $8\Omega \approx 4572$  BTU/Hr

Power output under normal operating conditions (1/8th max. pwr.)  $\approx$  161 Watts Current consumption under normal operating conditions  $\approx$  9.3 Amps Max. heat dissipation @ 1300 Watts output into  $8\Omega \approx 955$  BTU/Hr

#### **MODELS AVAILABLE:**

C-Series - Black or Silver 17 inch without handles or 19 inch with handles

Rackmount Version - Silver or Black 19 inch with handles

Pro Version - 19 inch rackmount Black with handles

Specifications subject to change without notice.

# **20 YEAR LIMITED WARRANTY**

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