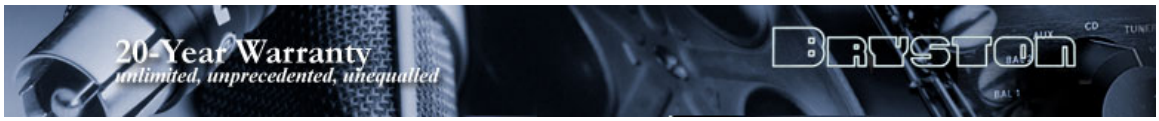
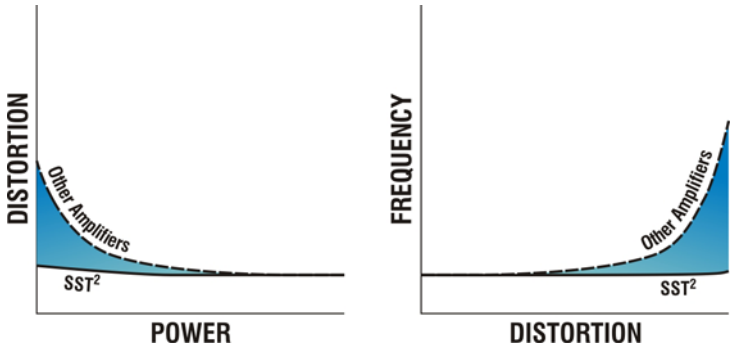


SST² (Squared) Amplifier Philosophy

FIRST TO LAST WATT PHILOSOPHY:

A significant part of the design criteria for the new SST² (squared) was to develop amplifiers that would maintain an ideal power curve through the 'first and last watt'. Most amplifiers exhibit a power curve whereby the best noise floor, drive capability and distortion are maintained from about 1/3 power and up. The new Bryston SST² (squared) series maintain their ideal power curve right from the first watt to the last watt. Think of it like a torque curve in a car. The sweet spot or the torque curve has been expanded.

Achieving this 'First-to-last-Watt' fidelity and clarity has to do with a number of design approaches:



- **First is complete freedom from low-level crossover, or zero-crossing, artifacts. This is not as easy as it sounds. Most class-AB amplifiers have sufficient bias to prevent primary crossover distortion, but there is another type of crossover artifact called 'secondary crossover distortion', caused by insufficient speed in the driver transistors. We use very fast drivers to prevent this, but more important is Bryston's proprietary Quad Complementary Output design vastly reduces the capacitance 'seen' by the driver transistors, virtually eliminating storage delay in the output stage that could contribute to nonlinearities in the zero-crossing region.**

- **Second is Bryston's continuing efforts to reduce low-level noise. The clarity of Bryston's designs is enhanced at low listening levels by pushing the noise floor far below the signal level, improving the 'silence between the notes' and enhancing the clarity of the music at low power levels.**

- **Third is Bryston's concentration on reducing distortion at all levels, and most especially at high frequencies. Bryston amplifiers are perhaps the only designs to concentrate as much effort at reducing HF distortion artifacts as we do, and the results are remarkably 'flat' THD-with-frequency curves, showing almost no tendency to increase distortion as frequency rises. This has the effect of reducing overall 'haze', helping to pull the quietest passages out of the background.**

There are other small contributors to this low-level clarity, some having to do with power-supply design for extreme stability, (and in Stereo or multi-channel amps, separated for each channel), which very notably improves the placement-in-space and focus of the sonic 'image'. We think the overall result is an unprecedented degree of clarity and freedom from artificiality, especially noticeable at lower levels in comparison with other designs, but continuing to even the highest outputs.

James Tanner
Bryston Ltd.