

## Relentless Monoblock Amplifier



Dan D'Agostino has always had a relentless desire to better his own creations, no matter how flawless they may seem. The Relentless Monoblock amplifier is the latest manifestation of that passion, the result of Dan's desire for an amplifier that maintains its harmonic integrity and expansive soundstage from 0 watts to 1,500 watts. An amplifier so powerful it can drive any speaker to its best possible performance, no matter how demanding the load it may present.

With its 5.5-kilowatt power supply feeding roughly 100 output devices, the Relentless Monoblock easily delivers 1,500 watts into 8 ohms—and when connected to a 220-volt outlet, it doubles its output to 3,000 watts into 4 ohms and 6,000 watts into 2 ohms, all while maintaining the same musical composure it offers at a mere 1 watt.

The Relentless Monoblock employs an all-new, fully complementary topology based around a precision input stage that maintains an essentially perfect balance between the positive and negative components of the signal. Any distortion artifacts that appear on one half of the signal will also appear on the other half, and thus cancel each other. Gain circuits operate in the current domain, assuring the Relentless Monoblock's performance does not fluctuate no matter what the demands. Global negative feedback is not employed, nor is it required as the amplifier's open-loop linearity eliminates the need for this performance-robbing technique.

The core of the power supply is a transformer that uses multiple sections running in concert, all potted and encased in a metal shield. This design reduces transformer noise to near zero and protects the audio circuitry from the transformer's magnetic field. The transformer feeds a custom-designed rectifier circuit and a 600,000-microfarad/100-volt capacitor bank. A special holder mechanically grounds each capacitor so it won't vibrate. A slow-start circuit activates the power supply in stages, eliminating concerns about capacitive inrush tripping household circuit breakers.

Dan D'Agostino's exclusive Super Rail concept makes maximum use of the incredible resources of this power supply. Super Rail employs higher voltage rails in the sections prior to the output stage, effectively "turbocharging" the amplifier and exploiting the full capability of the output voltage rails—which improves dynamics, lowers distortion, and tightens the amplifier's electrical grip on the speaker.



The Relentless Monoblock's unique heat sink combines copper and aluminum in a thermal engine that wicks away heat from the connected devices. The elaborate elliptical design expands on the venturi heat sink first explored in the Momentum series, and assures that the Relentless Monoblock runs safely and reliably even when delivering its full rated power. Thermal, short circuit, and DC protection are included in a non-invasive but comprehensive defense against any external system faults.

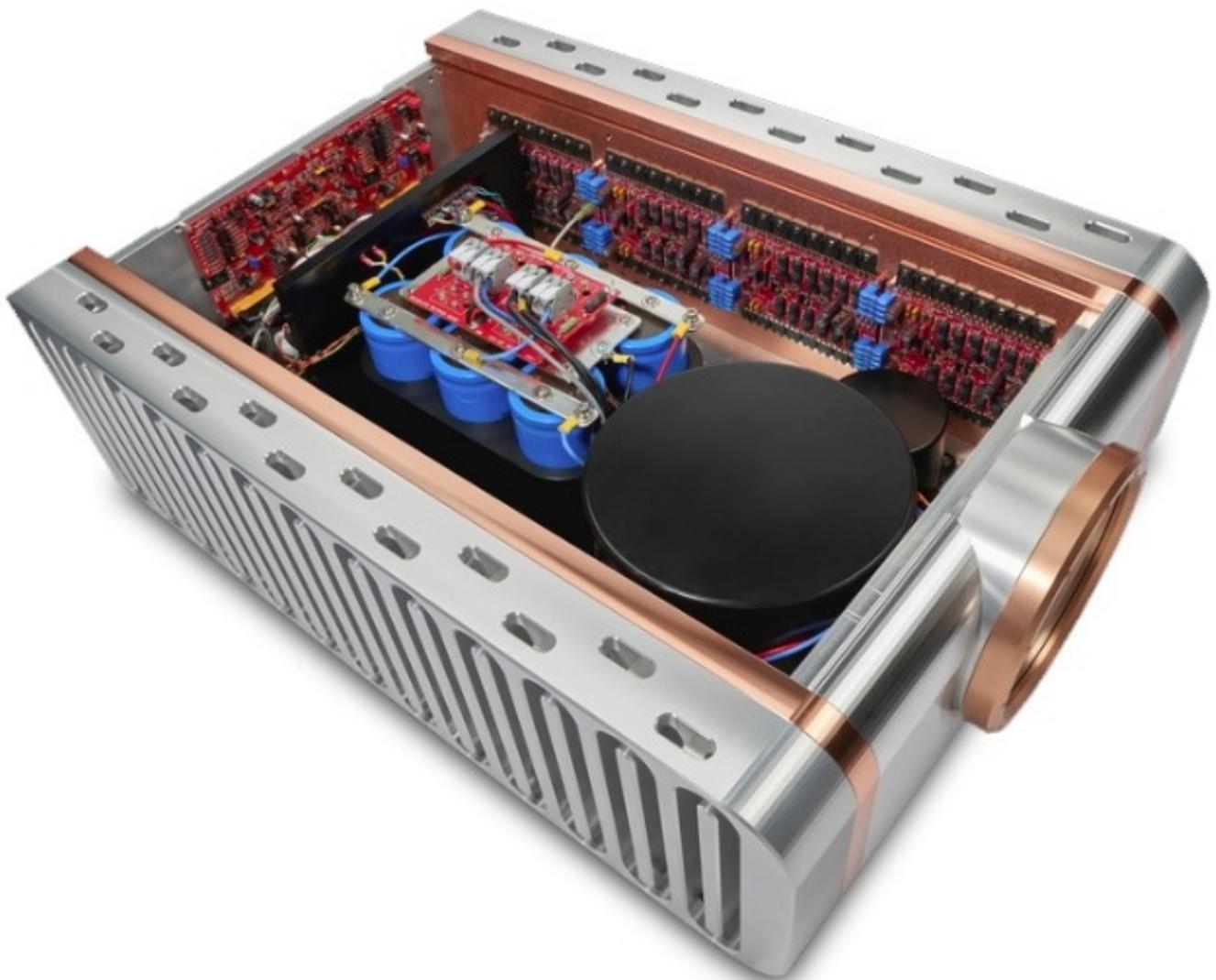
The entire chassis of the Relentless Monoblock is machined from solid aluminum, for superior shielding, thermal stability and vibration damping. High-precision milling allows the entire chassis to fit together solidly with no visible fasteners.

The Relentless Monoblock's new power meter measures more than 8 inches in diameter. The meter's range and response automatically adjust to the level of the incoming signal, making it easy to read no matter how quiet or loud the musical passage is.

In keeping with the tradition begun with the Dan D'Agostino Audio Systems Momentum amplifiers, the Relentless Monoblock offers a single XLR balanced input. Speaker connections are made using massive binding posts made from gold-plated brass.



Just as no audio designer has been more relentless than Dan D'Agostino in his pursuit of perfection, we think it safe to say that no power amplifier has been designed and built to a higher standard than the Relentless Monoblock.



## SPECIFICATIONS

|                                  |   |
|----------------------------------|---|
| <b>Frequency Response</b>        | : 20 Hz to 20 kHz, $\pm 0$ dB                                 |
|                                  | : $< 0.1$ Hz to 100 kHz $+0/-3$ dB                            |
| <b>Signal-to-noise Ratio</b>     | : $> 113$ dB, wideband, unweighted, ref. to full power output |
|                                  | : 28 dB   |
| <b>Total Harmonic Distortion</b> | : $< 0.007\%$ at 1 kHz, at 1,500 W, $8\Omega$                 |
| <b>Input Impedance</b>           | : $100\text{ k}\Omega$  |
|                                  | : 1,500 W RMS at $8\Omega$                                    |
|                                  | : 3,000 W RMS at $4\Omega$                                    |
|                                  | : 6,000 W RMS at $2\Omega$                                    |
| <b>Output Voltage</b>            | : 320 V peak-to-peak  |
|                                  | : 113 V RMS   |
| <b>Output Current</b>            | : 400 A peak  |
| <b>Slew Rate</b>                 | : $100\text{ V}/\mu\text{s}$                                  |
| <b>Output Impedance</b>          | : $< 0.03\Omega$ , 20 Hz to 20 kHz                            |
| <b>Damping Factor</b>            | : $> 267$ , 20 Hz to 20 kHz, ref. to 8 W                      |
| <b>Power Consumption</b>         | : Standby: 40 W   |
|                                  | : Idle: 480 W   |
|                                  | : Maximum: 10 kW  |
| <b>Inputs</b>                    | : 1 balanced via XLR connector                                |
| <b>Outputs</b>                   | : 1 pair binding posts  |
| <b>Dimensions</b>                | : 22.5 x 11.5 x 32.5 in                                       |
|                                  | : 57.2 x 28.0 x 82.6 cm                                       |
| <b>Weight</b>                    | : 470 lbs.  |
|                                  | : 285 Kg  |

