

FOR IMMEDIATE RELEASE

Dan D'Agostino Master Audio Systems Introduces Flagship Relentless Preamplifier

- The Relentless Series expands with a preamplifier to match the Relentless Mono Amplifiers -

**CAVE CREEK, AZ, OCTOBER 2021** — Dan D'Agostino Master Audio Systems today announced the Relentless Preamplifier. The companion model to the Relentless Mono Amplifier, the Relentless Preamplifier combines inventive power supply and audio circuitry, an elegant architecture, and a suite of innovative features.

The breadth of the Relentless Preamplifier design requires the use of three separate chassis – a dedicated audio chassis for each channel and a separate power supply centered between the two to keep the power supply feeds as short as possible. The three chassis interlock through special mechanisms in the mounting feet of each chassis. Thirty pin interlocking 20-amp, gold plated connectors eliminate wiring normally used for these applications and the associated anomalies that can occur. This distinctive construction isolates the audio signal completely, both physically and electrically from the power and digital control sections. Physical isolation offers additional room to maximize both power and audio circuitry. This monaural structure also separates the two audio channels from each other ensuring the ultimate channel separation.

#### **Power Supply Highlights**

Positioned between the two audio channels, the power supply makes use of extensive electrical and magnetic shielding to keep radiated interference out of critical preamplifier circuits. Internal line conditioning circuitry filters RF noise on the AC power and compensates for asymmetric power waveforms and DC on the mains. Power for the preamplifier stages comes from two 150 VA toroidal transformer – one dedicated to the analog circuitry and one for the digital and control circuitry. These transformers drive an 8-amp bridge rectifier and 26,400 microfarads of filter capacitance. The two regulators for the analog stages are scaled-down versions of those used in the Relentless Mono amplifier.

#### **Audio Circuitry Highlights**

The input stage in each mono preamplifier is the result of a design experiment for a circuit that hadn't been used in any previous D'Agostino preamplifier. The audio circuit topology starts with a completely unique new discrete differential FET input stage featuring a voltage input signal capability of an extraordinary 30 volts. With an input impedance of over 1 MOhm, the Relentless Preamplifier's front end is immune to source related electrical issues. In normal operation, component heating can lead to performance and sonic degradation. Developed specifically for the Relentless Preamplifier, a unique circuit maintains a stable bias so that temperature related anomalies are offset thus preserving performance during extended listening.

Featuring only balanced XLR inputs the Relentless Preamplifier topology rejects common-mode input noise over an unusually wide bandwidth. All signal gain is realized in the current domain using proprietary multiple-output current mirrors with nearly 30 times the linearity of other designs. Executed with four-layer circuit boards for superior signal quality, the use of four-layer boards dramatically reduces distortion and propagation levels as compared to the more commonplace, two-layer boards.

Analog and digital circuit elements are isolated, including ground planes, from each other. Where necessary, digital control signals are optically coupled to analog circuits. The signal switching relays are hermetically sealed and use gold-plated contacts for maximum signal integrity.

Utilizing no negative feedback anywhere, core D'Agostino circuit concepts include a signal path that is fully complementary, direct coupled, and balanced from input to output achieving a frequency response flat to 120 kHz.

*"The new Relentless Preamplifier is a major moment in our pursuit of making audio components that deliver the most musical presentation possible. It has been a more than four-decade pursuit and the Relentless Preamplifier is a crowning jewel of my career."* Said Dan D'Agostino, Co-Founder and Chief Engineer.

### **Separate but Linked Units**

Arguably, the most striking element of the Relentless Preamplifier is the pair of volume controls fronting the two audio chassis. Volume control circuits are often overlooked, if not actively diminished, in preamplifier designs. This is not the case in the Relentless Preamplifier. Each volume control is constructed using 14 separate metal components ensuring the smoothest response and control of the military-grade, high-linearity solid-state switches and discrete precision resistors employed in the volume circuit. The bandwidth and transient response of the Relentless Preamplifier is completely unaffected by the volume setting. The volume settings are displayed via the elegant swiss watch inspired volume wands or can be displayed numerically, from 0 to 99.

### **Dual Zone Functionality**

The Relentless Preamplifier is a two source/two zone preamplifier. This means that the Relentless Preamplifier can simultaneously control the switching and volume of two sources in two separate rooms or zones. This may be two analog sources or when equipped with the streaming digital module, one digital source and one analog source. In a one zone system, either volume control will adjust volume in the main room or Zone 1. If two zone operation is desired, the upper volume control manages the Zone 1 volume and the lower volume control adjusts the Zone 2 volume.

### **New Bidirectional remote**

Housed in machined aluminum and copper, the Relentless Preamplifier remote control is a comfortable design, operated via touch pad. Bluetooth Six technology extends the usable range of the remote control and eliminates the line-of-sight issues that plague conventional infrared designs. New bi-directional remote functionality reflects all adjustments made on the Relentless Preamplifier front panel to the remote control's display screen including input, volume, and balance selections.

### **Optional Digital Streaming Module (DSM)**

The Relentless Preamplifier is the first D'Agostino preamplifier to offer an optional DSM. This digital enhancement adds connectivity for legacy sources, USB functionality, and premier streaming capability. Field upgradeable, the DSM adds SPDIF coaxial, Optical, USB-A, and RJ-45 and Wi-Fi network inputs. For latency free playback of high-resolution network content, 10/100/1000 Gigabit Ethernet is supported.

Customized apps for iOS devices provide easy control of music collections, streaming content, and unit control. Subscription streaming services Tidal, Qobuz, and Spotify are native within the app. With appropriately encoded music files, MQA decoding is standard. Additionally, Roon Music management is also available as an alternative music management program.

Completely isolated from the analog circuitry, the DSM is housed in the power supply/control chassis. Requiring three separate circuit boards the core element is a pair of DACs configured in differential mode with each one configured to handle the positive and negative signals for each channel. Capable of handling today's highest resolution sources, PCM signals up to 32 bit/384 KHz and DSD signals up to DSD256 (11.2MHz) are decoded natively. Often overlooked or downplayed, the analog section of a DAC significantly impacts the final sonic performance of digital music. Internal balanced connections carry the final analog signal to the connecting feet and onward to each audio chassis. From here, the analog music signal takes advantage of the entire power and analog circuitry within the three chassis of the Relentless Preamplifier.

The Relentless Preamplifier is priced at £165,000 in the UK (inc. VAT and installation) and begins shipping in November 2021 in silver, black, or custom painted finishes.

For more information on Dan D'Agostino Master Audio Systems and its products, please visit [dandagostino.com](http://dandagostino.com).

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