D’Agostino Momentum C2 Preamplifier

REVIEW By Mohammed Samji

Developed by **Dan D’Agostino Master Audio Systems**, the C2 reflects a design philosophy that prioritizes noise reduction, channel isolation, power integrity, and linearity above all else. After spending time with the unit and walking through its engineering with the design team, it becomes clear that nearly every element has been reconsidered. After living with the C2 in my room for almost 9 months, I say with no hesitation, it is the quietest and most dynamic pre-amplifier I have experienced.

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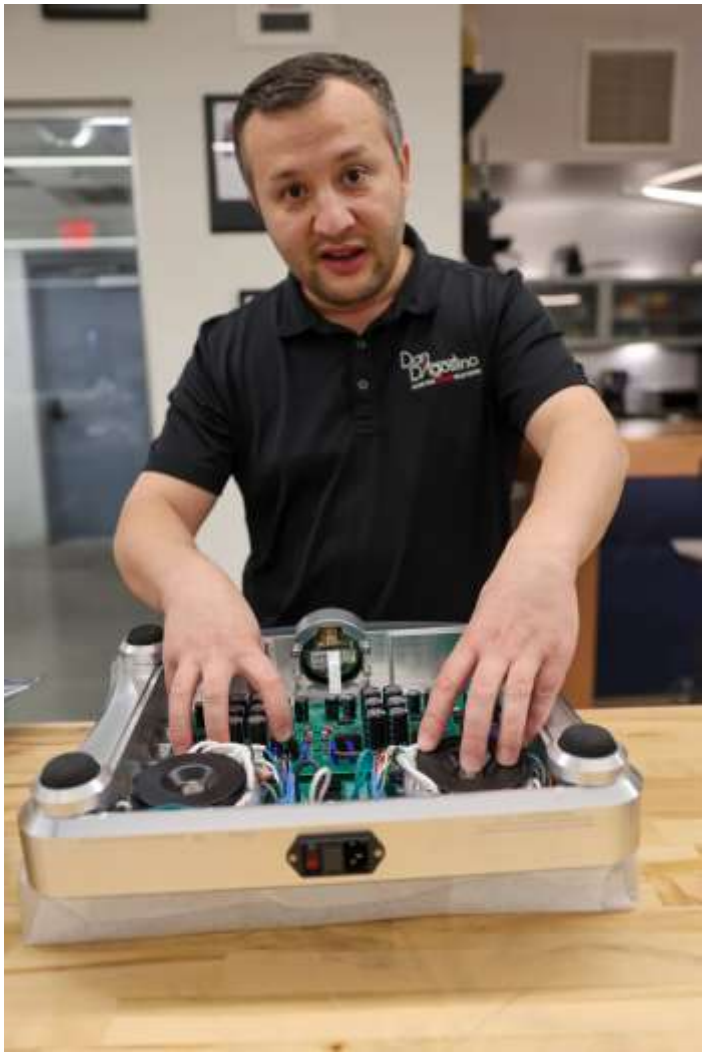
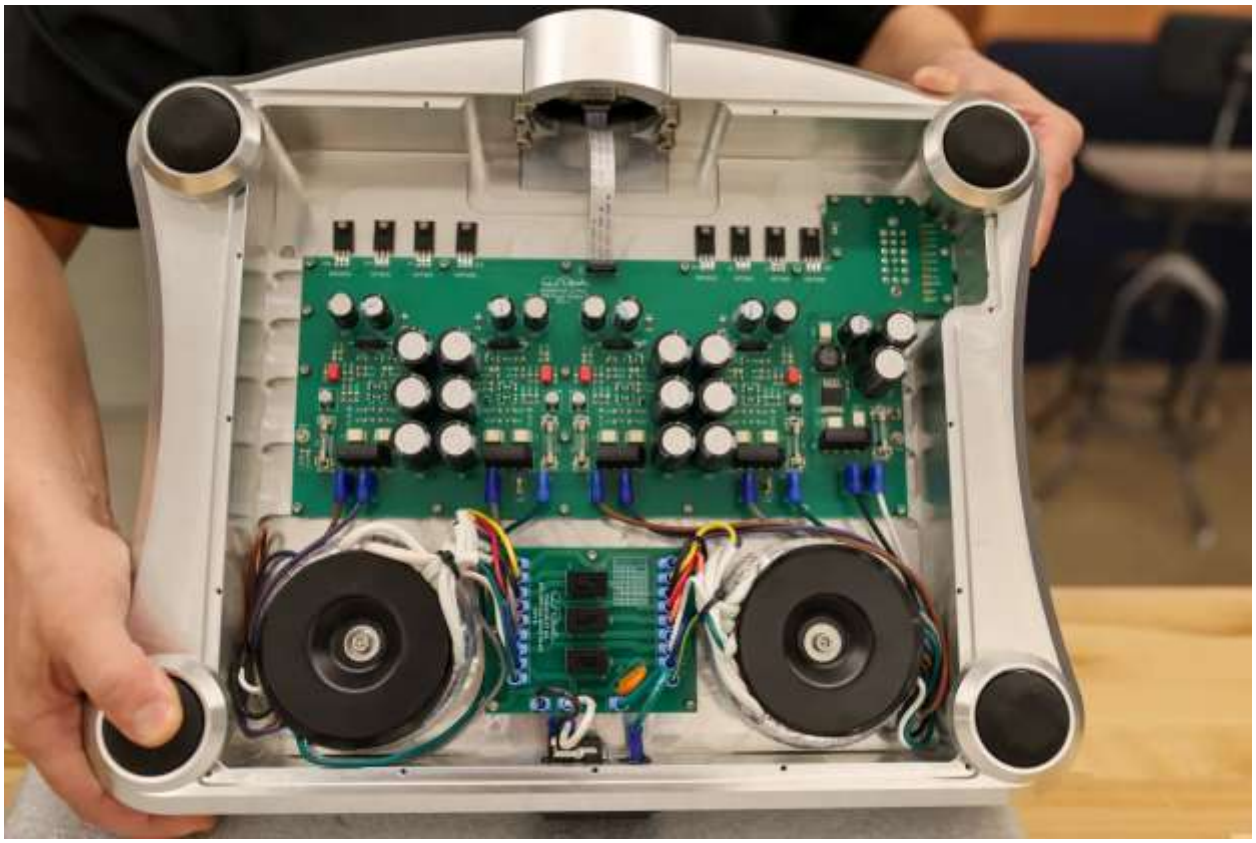
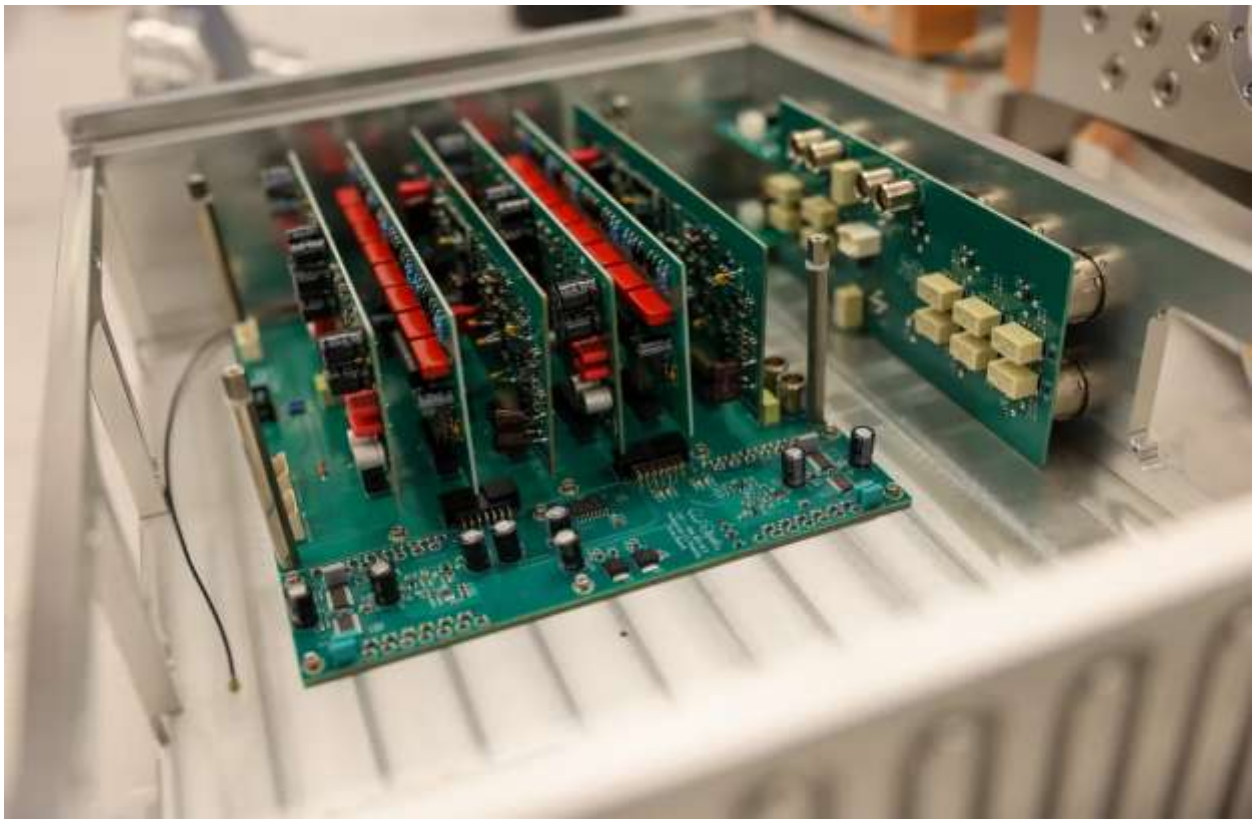


Previous Momentum and Momentum HD preamplifiers employed a two-chassis configuration in which the bottom unit housed a rectifier and transformer, while the regulator lived in the top chassis. Power was delivered between the two via a short umbilical cable.

The transformers themselves are physically larger than those in the HD, and the regulation system has been entirely redesigned. According to Chief Engineer Burhan, the new regulation delivers **~45% improvement** over the HD, measured via lower ripple, lower THD contribution, and improved power stability.This improvement does not come "for free." Power consumption rises from ~70W in the HD to **~120W in the C2.**The mono design extends through the entire pre-amplifier. Each channel gets not just one transformer; each channel gets its own rectifier, regulator, and input stage, volume stage/output stages.





Momentum C2 | Eliminating the Umbilical

A welcome change in the design is how the two chassis connect. Instead of carrying raw voltage across a short cable—as in the HD—the C2 uses a specialized electro-mechanical connectors integrated within each unit.

This is built around thirty 22-micron gold-plated pins, each capable of handling 20 amps, in an interlocking connector that allows for perfect alignment. This distinctive configuration guarantees complete isolation of the audio signal, both physically and electrically, from the power supply components. Furthermore, this physical segregation creates additional space for the optimization of both power and audio circuitry.

Momentum C2 | Concept 2 Analog Circuit Topology

The “C2” designation is not cosmetic—it refers to an entirely new **front-end circuit topology**. When you think of a pre-amp, it has three key jobs: an input stage, a volume control stage, and an output stage.

On some products, that might all be on a single chip. With the C2 in its mono design, each of these jobs has a dedicated board per channel, resulting in 6 boards total to support these tasks

– three per channel. In the Relentless pre-amplifier, this goes one step further with these boards spread across three chassis.

Momentum C2 | Input Stage

The input stage has been re-designed as a complementary push / pull design that leverages 4 JFETs per channel vs. 2 JFETS in the prior Momentum generations. The reference Relentless pre-amplifier uses 8 JFETs per channel.

I asked Dan to explain in more detail what they mean by complementary push/pull and its benefits. He explained:

"Complementary circuitry is a topology in which one device is optimized to handle the positive half of the waveform and a second, complementary device is optimized for the negative half. I have long believed that using a purpose-designed tool for each task is the most effective way to maximize both measured performance in terms of noise and more importantly, sound quality. This design principle is applied throughout the entire audio signal path, from input to output."

This new design delivers ultra-low noise and distortion. The noise floor improves dramatically, rated at ~98 dBu vs. 80 dBu in prior generations. The relentless is rated at closer to 100!

Another welcome change is that the input stage can handle **15V without clipping** (HD clipped at ~6-7V).

This additional input voltage tolerance allowed me to turn up the gain on my **CH Precision** P10 Phono stage to where it sounds best. In 2025, I shifted to a CH Precision P10 phono stage driving an ultra-low output **Lyra** Atlas λ Lambda SL cartridge in current mode. This generates some serious voltage, and I was only able to use it at the lowest gain level with the prior Momentum HD to keep the voltage under 6 volts.

With the C2, I can easily use any gain setting on the CH P10 without issue. With this freedom, I now run the CH P10 at +18 dB gain in current mode. The combination of the CH P10, Lyra Atlas SL, **Acoustical Systems** Axiom 12-inch Reference Arm, Momentum C2, and Momentum S250 MxV amplifier is the best analog playback I have experienced anywhere. In practice, the C2 is *dead silent*. Turn the volume on the C2 all the way up in my turntable setup, and it's whisper-quiet on my Wilson Audio Alexx V loudspeakers.

Momentum C2 | Volume Stage

Like other D'Agostino Pre-amplifiers, the volume stage takes a different approach. The Momentum platform continues to use **military relays**—the same class used in the HD—but the

implementation is new. For context, these military-grade relays cost 20x as much as a standard relay. The key difference is that the military relays use gold contacts and tighter tolerances.

The gain structure has been revised, and the input gain now increases from**8 dB (HD)** to **10 dB (C2).** A new volume curve is optimized for the revised topology.

If you own or have used a D'Agostino pre-amplifier, you will be familiar with the small clicks that you can hear when adjusting the volume. That sound is the relays engaging only the resistors necessary for the volume you are calling for. This is different from most other pre-amplifiers, which leave a resistor in parallel rather than turning on the necessary resistors for each given volume.

This design is one of the differentiators of D'Agostino pre-amplifiers and results in finer low-level resolution, smoother transitions, and reduced audible relay artifacts. Dynamics—especially micro-dynamics—benefit noticeably. This relay click is much more subtle on the C2 and almost not noticeable.

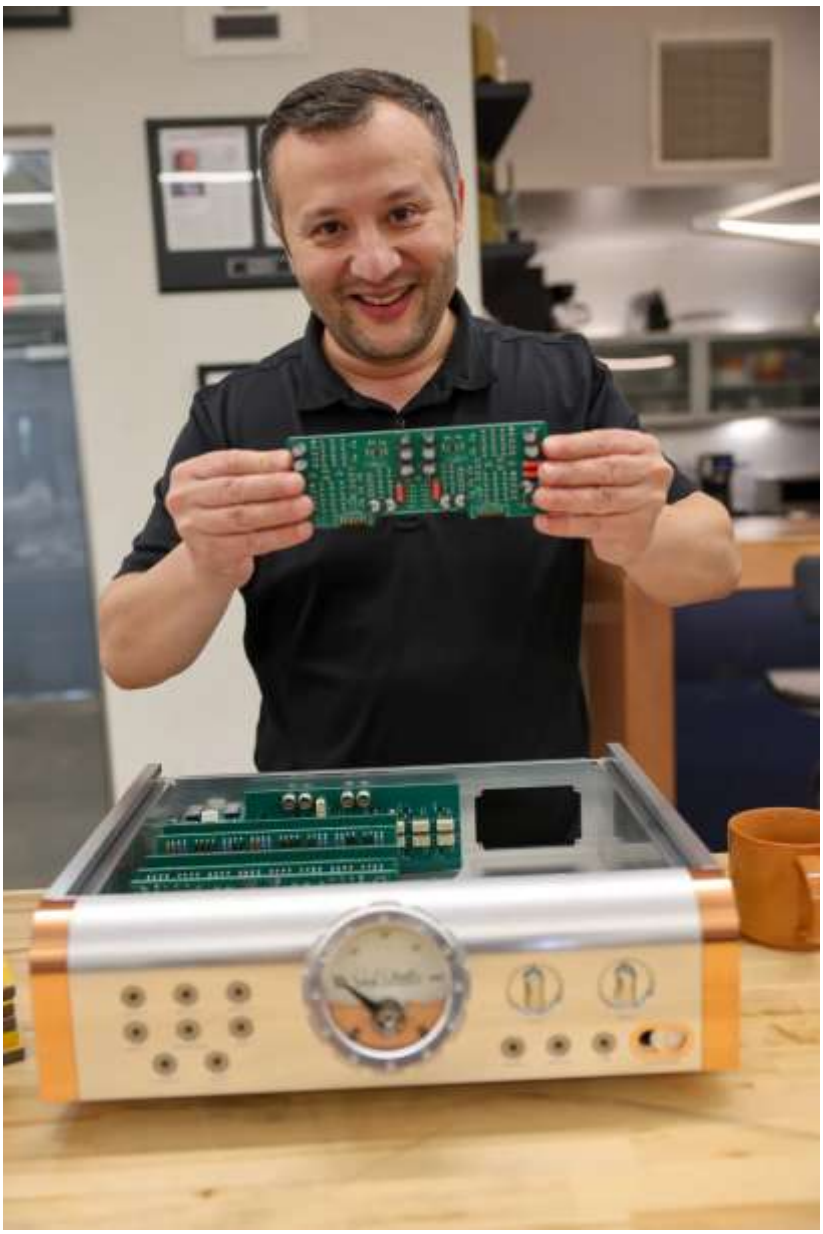
Momentum C2 | Output Stage

The output stage has been redesigned to mirror the input philosophy:

- Complementary push-pull transistor topology
- Increased current handling to match the higher-bias input stage

- Additional connectors on the output boards to support the larger current drain.

This symmetry between input and output stages is key. Every input topology demands a corresponding output stage capable of preserving its linearity under load, and the C2 delivers.



The theoretical ideal of a preamplifier—**infinite input impedance, zero output impedance**—is approached here more closely than ever, with the output impedance measuring in at **~0.005Ω** in the C2 vs 0.08Ω on the prior Momentum.

If you're using networked or impedance-matched cables, recalibration might be necessary. I noticed a clear improvement once the Transparent Magnum Opus between the C2 and my Momentum S250MxV was properly calibrated to match the C2's output impedance.

Burhan also called out a few other performance figures he wanted to highlight. Specifically, the SNR is 98 dB, and the unit's frequency response is 10 Hz – 90 kHz with 0 dB loss. Overall, the C2 offers a lower THD than the prior HD despite its higher gain.

Momentum C2 | Display, Control & User Interface

The C2 introduces a high-resolution OLED display. This allows you to get a precise volume setting and a volume readout from across the room. I love the D'Agostino meters, but getting a large view of the volume level is a welcome addition.

The display also provides input selection (including the friendly name set), phase, mute, tone controls, and streaming metadata when the optional DAC is installed.

Momentum C2 | Tone Controls: Still Analog, Now More Visible

Beautiful tone-control dials are featured on the front panel of the C2, as they are on the HD. The tone controls remain fully analog in the signal path. What's new is digital monitoring: they can be engaged or disengaged remotely, and their levels are displayed on the OLED screen. The C2 is one of the few reference pre-

amplifiers that still includes tone controls, so it's great to see them retained.

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Momentum C2 | Headphone Output

Another welcome addition: a headphone amp discreetly integrated into the front panel. A button on the front panel can activate it, disengaging the main two outputs and engaging the headphone output. The Headphone input is hidden discreetly behind a sliding panel to not disturb the aesthetic.

The Headphone output is a ¼ TRS connector, and once engaged, that same beautiful volume control takes charge.

I torture-tested the headphone output with my favorite—and notoriously difficult-to-drive—ZMF Caldera Limited Edition headphones. I had to raise the volume to around 75, but the Calderas came alive and had my feet tapping. It brought out the best in the ZMF, with a

whisper-quiet background. For an integrated headphone output, it's more than you'll ever need.

Spec of headphone output:
at THD+N %1
300 Ohm – 2.5W RMS
600 Ohm – 6W RMS

Momentum C2 | Inputs, Outputs & Connectivity

- Three Balanced inputs
- One single-ended input added (new for C2)
- Two balanced outputs
    - Both outputs can be enabled/disabled via the remote.
    - Ideal for subwoofers (I use the second output for **Wilson** Submerge Subs)
    - Shared volume control across outputs (on/off only per output)
- 12-volt trigger to turn on devices (I use this to turn on my Momentum S250 MXV amp)
- A ¼ inch TRS input on the front for headphones.

- The physical spacing between the RS-232 and antenna ports has been improved, allowing both connectors to be used simultaneously. I had trouble using an RS232 cable for Home Automation + antenna plugged in simultaneously on the prior HD.

In addition to these inputs/outputs, you can optionally add a D'Agostino DSM "Digital Streaming Module."

The optional DSM module can be specified at the time of purchase and factory-installed, or installed later by an authorized dealer. It is a slide-in card that fits into the rear of the unit and requires only two cables: one for connectivity and one for power.

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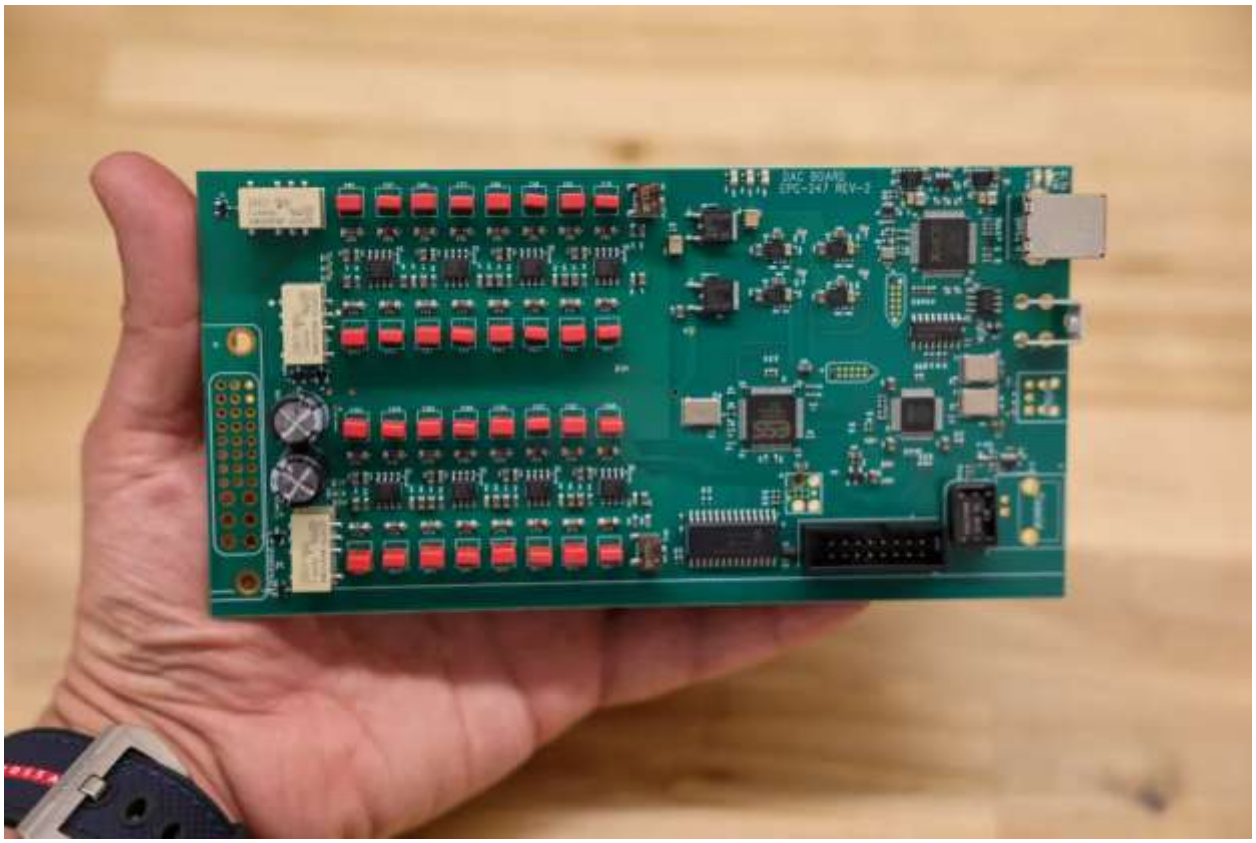


Momentum C2 | Digital Steaming Module

Internet connectivity is supported via Wi-Fi with the included antenna or via wired Ethernet. It is recommended to use a hardwired connection, and the wireless antenna is turned off by default at the factory. This setting can be changed in the user menu using the Vision Remote.

Supported formats for the DSM include:

- DSD256

- PCM up to 32bit/385kHz
- MQA
- Roon Ready
- TIDAL Connect
- Qobuz Connect
- Spotify Connect

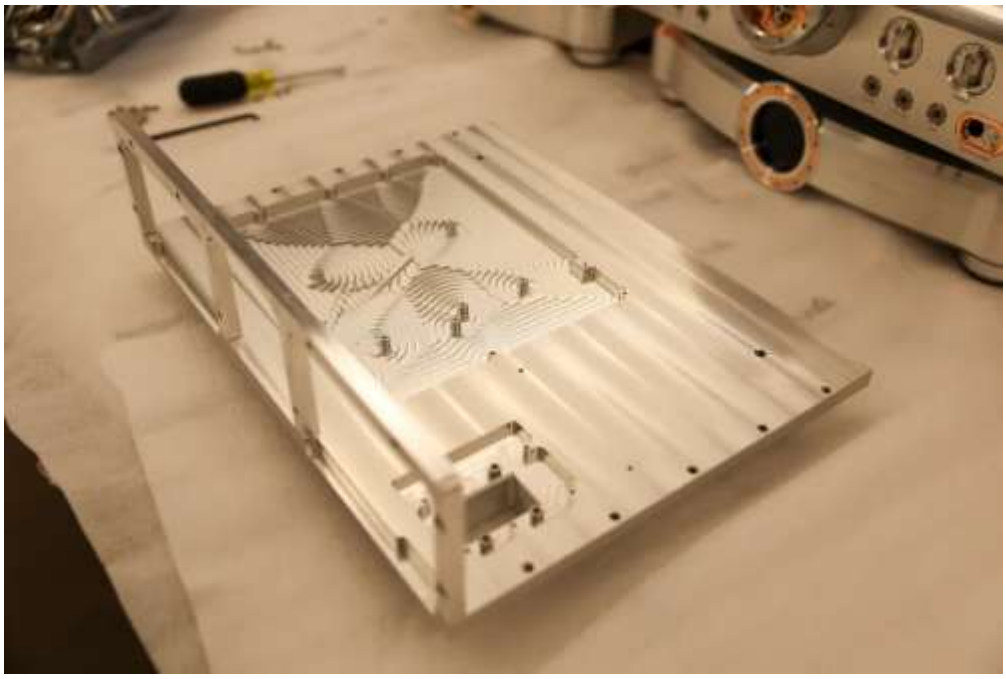
I used the DSM via a TOSLINK connection fed by my AVPro 8×8 video matrix to support the family room TV for several months without a single issue. It was subjected to countless hours of content from Apple TV, Roku, and Kaleidescape, all without a hiccup. The setup offered a seamless and convenient way to integrate my video sources into the rest of my system.

A tailored iOS companion app provides native streaming integration with Qobuz, Tidal, and Spotify, independent of their respective Connect protocols.

The iOS companion app allows:

- Input renaming (displayed on-screen and via remote). This is a cool feature you get with the DAC installed.
- Firmware updates
- System configuration

Momentum C2 | Chassis



All of this is packed into an aerospace-grade 6000-series aluminum chassis with a six-piece modular design. All the aluminum and 99.9% pure copper pieces are machined in Colorado. This modularity makes the unit easy to service and also allows you to replace one of the six sides if you accidentally damage the exterior.

My Setup

After spending a full day in Cave Creek, I couldn't wait to get a Momentum C2 into my Seattle listening room to hear just how significant an improvement could be achieved by replacing my trusted Momentum HD with the new Momentum C2 preamplifier.

In my system, digital playback is handled by a dCS Varèse DAC and streamer. Analog duties are managed by a CH Precision P10 phono stage paired with an AMG Forte turntable, Acoustics Systems Axiom tonearm, and Lyra Atlas SL cartridge. The Dan D'Agostino Momentum S250 MXV provides amplification, driving Wilson Audio Alexx V loudspeakers. Low-frequency reinforcement comes from a pair of Wilson Audio Submerge subwoofers, connected via the C2's second main output.

System control is handled through a Control4 whole-house automation platform, with the C2 controlled via RS-232 and all other components managed over IP.

Every component in the system is grounded to a pair of Shunyata Altaira X grounding hubs. Power is delivered via a Shunyata Everest X 8000 power conditioner, with Sigma X and Omega X power cables throughout.

All interconnects are Transparent Magnum Opus Gen 6, and speaker cabling is Transparent Reference XL Gen 6—including a 60-foot run concealed beneath the floor from my HRS SXR racks to the Alexx V speakers on the opposite side of the room.

Listening Impressions

The defining characteristic of the Momentum C2 is *absence*:

- Absence of noise
- Absence of grain
- Absence of compression

Low-level detail retrieval is extraordinary. On recordings such as Leonard Cohen's *"Famous Blue Raincoat,"* background vocals and subtle studio artifacts emerge intact—never highlighted or exaggerated, simply revealed as part of the recording.

Dynamics, both macro and micro, are delivered effortlessly. The C2 does not editorialize or draw attention to itself; instead, it removes barriers between the recording and the listener.

Tweaks That Impacted C2 Performance

I am not a heavy believer in tweaks for their own sake. What matters most is system synergy, and I've carefully assembled a combination of D'Agostino, dCS, CH Precision, and Wilson components that work exceptionally well together in my room.

After running the C2 in stock configuration for several months, I made three changes that resulted in clearly audible, non-subtle improvements. These are optimizations I apply to every component in my system, including the Momentum HD it replaced.

Wilson Pedestal Feet with the C2

For the C2, I used four Wilson Pedestal Feet (Heavy version with red rings), positioned evenly beneath the power-supply chassis between the unit and the HRS M3X base. The result was a noticeable improvement in clarity and composure, particularly at lower listening levels.

Shunyata Altaira X Grounding Hub with the C2

Make no mistake—the Momentum C2 is already exceptionally quiet. It may be the quietest preamplifier I've had in my room. Even so, grounding the C2 to the Altaira X grounding hub further improved performance, producing even darker backgrounds and greater micro-detail.

The A/B comparison is simple, and I strongly encourage listeners to try it for themselves.

I experimented with several grounding approaches for the C2. Initially, I grounded the unit to the Altaira using a Shunyata grounding cable terminated to a chassis screw on the C2, which yielded positive results. An even more effective solution was to use two grounding cables with XLR tails connected to the unused Input 3 on the C2. Employing dual grounding cables between the C2 and Altaira further elevated the overall performance.

This is how my C2 is grounded, and I would not want to live without it. I am also using Shunyata's latest X-series grounding cables, which I highly recommend.

Pricing & Positioning

- Momentum C2: ~$55,000 USD
- With DSM: ~$62,500 USD
- Momentum HD launched at $35,000 (later $42,500)

This is a significant step up in cost—and in performance. Importantly, D'Agostino does not design around competitors. You will not find any competitive products in their factory. All you will find are D'Agostino pieces connected to Wilson Audio loudspeakers. The benchmark is internal: *How close can Momentum get to Relentless?*

With the C2, the answer is: **closer than ever.**

Final Thoughts

As much as I loved the D'Agostino Momentum HD for years, I can't live without the updated Momentum C2. It brought out the best in my equipment, stepped back to let the music shine, and became the heartbeat of the quietest and most dynamic audio system I have experienced in my room. It comes with my highest recommendation and earns our reviewers' choice award.