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THE JOURNAL OF HIGH-END AUDIO

JANUARY 2025

### **Aesthetix Pallene Preamplifier and Dione Power Amplifier**



# CRYSTAL CLEAR

Aesthetix Pallene Hybrid Preamplifier and Dione Hybrid Power Amplifier



By Wayne Garcia • Photography by Matt Wright-Steel

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l've touched on this theme before, but it's worth revisiting and expanding on in the context of this review.

I am a wine merchant by day, and there are many descriptors and concepts we enophiles use in an attempt to communicate sensations—color, smell, taste, texture—in words that describe as clearly as possible not only our objective reactions to a wine's qualities but also how those reactions translate into our subjective opinion on whether a wine is not simply good or great, mediocre or bad, but how these sensations affect us emotionally. Interestingly, a good many of these words (and their attendant communicative challenges) may also be found in the audio reviewer's lexicon.

A short list of the most obvious might include full-bodied, warm, rich; or cool, lean, and airy; or focused, precise, forward, and transparent. Being a European wine specialist, the quality I especially prize is that last concept. Transparency. For me this means not simply that a wine clearly shows varietal typicity—cabernet, Sangiovese, chardonnay, and so on—but critically that the wine speaks of the place it came from, say, sticking to Europe: Bordeaux, Tuscany, or Burgundy.

Beyond that, is the Bordeaux from the left or right bank and from which appellation? Is the Sangiovese from Chianti Classico or Montalcino?

And Burgundy? That's a challenge unto itself. A region that captures the minds, hearts, and pocketbooks of the geekiest of wine geeks. Here is where identifying the nuances that define the region's distinct communes earns you street cred. But the next level up is distinguishing among the finest vineyards within a commune. What makes a Chambolle Bonnes Mares different from, say, neighboring Les Amoureuses or Musigny? Put another way, what makes it a wine of place and soul as opposed to just another tasty pinot noir?

How exactly this relates to the latest gear from the hands of Jim White and his team at Aesthetix is something I'll get to shortly, but I suspect you have already sensed where this might be headed.

The pair under review today are the latest additions to Aesthetix's Saturn series. As such they naturally sport names adopted from one of that planet's 146 moons.

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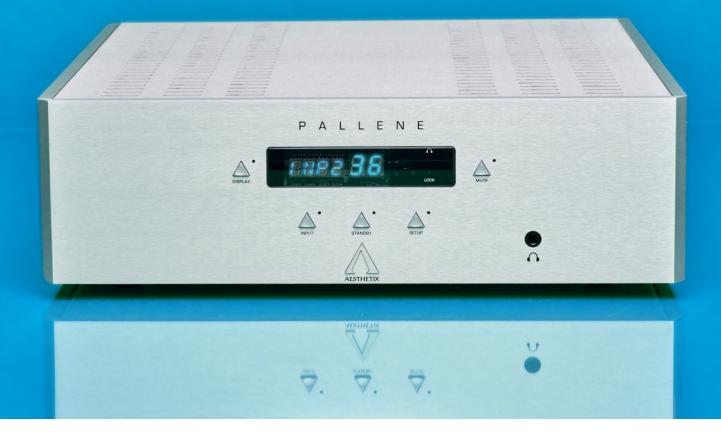




Both the Pallene preamplifier and Dione power amp (\$6500 and \$7500, respectively) are hybrid designs that one could say were birthed by Aesthetix's first integrated amplifier, the Mimas (wonderfully reviewed by Neil Gader in our May/June 2019 issue). As White emphasized in an email: "At Aesthetix, our product design is an ongoing process in which we continually build on our previously released work. Our latest products, Pallene and Dione, are no exceptions. To fully understand their technology, we must first unpack the challenges and breakthroughs that created Mimas.

"Mimas was released in 2019 and is an amalgamation of our award-winning Calypso pure tube linestage and Atlas hybrid power amplifier (tube input, solid-state output). Developing this integrated amplifier presented numerous technical challenges, as we wanted the highest performance possible while including a headphone output, an optional phono module, and an optional DAC module."

With a "wink" in his voice White also observed that at Aesthetix "One of the things that make us unique is our willingness to do things the hard way." White also observed that at Aesthetix "One of the things that make us unique is our willingness to do things the hard way."



For example, and quite rare in the audio field, Aesthetix manufactures all its transformers in-house. And though it may not seem particularly obvious, White told me how making transformers is so completely different an undertaking from audio manufacturing that it's like having a whole other company.

This reminds me of how A.J. Conti of Basis decided to grind his own drive belts in-house and developed the tools to do so, because no one could make them to his demanding spec. Similarly, with no prior experience, Aesthetix started making its transformers eight years ago because White wanted complete control over the process. "Most audio companies will provide voltage and current specs but leave the details to the [transformer] maker," he told me. Meaning while there are myriad approaches to creating the same transformer specifications, not every approach is ideal for audio applications.

Another thing Jim underlined is how fundamentally important creating his own transformers has been to his growth as an audio designer. Now it was Jim's turn for a wine analogy: "It's as if a producer is buying grapes versus growing grapes; the latter has more control. My designs before and after making our transformers are night and day."

Both units are housed in beautifully constructed, minimalist-looking brushed aluminum housings. Let's first unpack the Pallene.

#### **Design Pallene**

Here is a supremely functional modern-era preamp engineered to cover pretty much any contemporary music lover's needs. The circuitry is identical to that found in the Mimas integrated, which in turn was derived from work White did designing the Saturn series Calypso all-tube linestage preamplifier. "The volume control, the vacuum-tube gain stage, and input switching are all taken from our work developing Calypso. The volume control is a unique multi-stage switched-resistor network employing individual metal-film resistors in a balanced configuration. The gain stage is also fully balanced in a differential amplifier configuration, using one 6DJ8/6922 per channel."

The Pallene employs 100% zero-feedback fully balanced differential circuitry, while incorporating a solid-state balanced output buffer capable of driving long cable runs. Pallene also accepts the same phono and DAC modules as the Mimas and comes standard with a headphone output.

Getting into the technical nitty-gritty, White also points to the Pallene's unique technologies—multiple regulated power supply sections, including separate transformer winding and discrete regulation for the vacuum-tube high-voltage section; separate winding and discrete regulation for low-voltage sections; separate winding and reg-

#### Specs & Pricing

#### Pallene

Type: Hybrid preamplifier

Tube complement: 1 6DJ8/6922 per channel

Number and types of inputs: 5 pairs balanced XLR, 5 pairs single-ended RCA Input options: Phono (2 pairs RCA), DAC (2 coax RCA, 2 TosLink, 1 USB 24 bit/352K Number and types of outputs: 1 pair Balanced XLR, 1 pair single-ended RCA, 1/4" headphone

Dimensions: 17.9" x 5.5" x 17.7" Weight: 35 lbs. Price: \$6500 (phono module: \$1250; DAC module: \$1250)

#### Dione

Type: Hybrid power amplifier Power output: 180Wpc into 8 ohms, 280Wpc into 4 ohms Tube complement: 1 6DJ8/6922 per channel Number and types of inputs: 1 pair balanced XLR, 1 pair single-ended RCA; optional high-pass crossover: 1 pair XLR, one pair RCA Dimensions: 17.9" x 5.5" x 17.7" Weight: 44 lbs. Price: \$7500

#### **AESTHETIX AUDIO CORPORATION**

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#### ASSOCIATED EQUIPMENT

Loudspeakers: Magnepan 1.7i, 1.7x, and Piega Coax Gen2 611 Headphones: Audeze LCD-X Analog sources: Basis 2200 Turntable, Basis SuperArm, My Sonic Lab Signature Gold moving-coil cartridge Digital Source: Bluesound Node 2 Preamp: Sutherland N1 Cables: Nordost Tyr 2 AC Power: Nordost Tyr 2 power cables; Nordost Qx4 power conditioner and Qb8 AC distribution center



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### ALLENE



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#### Aesthetix Pallene Hybrid Preamplifier and Dione Hybrid Power Amplifier

ulated heater supplies; separate winding and regulation for the optional DAC module, as well as a separate transformer and regulated power supply for the display and control sections, in order to fully isolate any clocks and noise from sensitive audio circuits. Not to forget those low-flux custom-wound madein-house transformers.

The front panel is a model of elegant simplicity. The center display window is flanked by a pair of triangular buttons (whose shapes echo the company logo): DISPLAY (right, to illuminate or extinguish the LED panel) and MUTE (left). No VOLUME control is visible. Instead, pressing the left side of the display lowers the volume, pressing the right side raises it. Beneath the display window sit a trio of additional buttons—INPUT (selection), STANDBY (brings the tubes to life, otherwise the solid-state circuitry is always on), and SETUP (accesses all setup menus).

The rear panel offers a plethora of options: Five balanced and single-ended inputs and a single set each for preamp out, plus IR extender jack, DB9 RS232 connector, and a remote trigger jack.

When fully loaded, the optional phono module offers two sets of RCA inputs that can store unique settings for different cartridges. All are set via the front panel SETUP button. For moving-coils resistive load options are 47k, 20k, 10k, 5k, 2.5k, 1k, 750, 500, 375, 250, 200, 150, 100, 75, and 50 ohms (I used 500 for my My Sonic Lab Signature Gold), and gain settings are 60, 64, 68, and 72dB. For moving-magnet cartridges resistive load options are 47k, 20k, 10k, and 5kK ohms; capacitive load options are 100pF, 220pF, 330Pf, and 470pF, while gain values are 44, 48, 52, and 58dB.



White seems especially proud of the phono module's flexibility and quality, citing as one of his biggest accomplishments achieving such high levels of gain in spite of the challenges of various electromagnetic fields within the housing. "To me, that's a \$3000 phonostage for \$1250 (if this were a separate unit), because it uses the same FETs you'd find in a \$20k or \$30k stage."

The DAC module sports five digital inputs: one USB, and two each TosLink and coax RCA. Each can store a unique setting, and the USB input is capable of reading a 24bit/352k DSD and DSD2 signal, while utilizing Wavelength Technologies' asynchronous implementation. One may also deactivate any unused inputs.

Pallene also comes with an exceptionally nice-to-use backlit remote, reflecting White's thoughtfulness about the smallest details.

#### **Design Dione**

Rated at a healthy 160Wpc into 8 ohms and 320Wpc into 4 ohms, Dione, too, is a direct descendant of the Mimas integrated amp. I'll again quote Jim White

(with minor edits), as his explanations, like his design thinking, are crystal clear. "The core of developing Mimas was designing a new power output stage, which is based on the [Saturn series] Atlas but has slightly different requirements. Solving these new requirements led to numerous breakthroughs, resulting in a revolutionary new output stage incorporating an FET input/gain stage, bipolar driver, and bipolar output stage in a balanced bridge configuration.

"To achieve the performance, we wanted from this output stage we chose to use the much-coveted out-of-manufacture Toshiba 2SK246/2SJ103 (don't worry, we have lots!) that we match to very tight tolerances. They are the only devices we've found that can deliver the level of performance we demand for the FET input section of the output stage and are usually found only in extremely expensive audio equipment."

Zero feedback is another part of what makes Dione special.



In conversation, White explained how sensitive these devices are, saying that even touching them with our fingertips changes their measurements, which means that careful matching requires plenty of extra patience and attention to detail. "But it's the only way you can get away with no DC servo," Jim told me.

"You can add a DC servo, and it will be fine, but if you take it away, it is life changing—bringing a sense of life and naturalness to the sound that otherwise would not exist."

Zero feedback is another part of what makes Dione special. While noting that feedback is found in amps at all price levels and that there's nothing fundamentally wrong with it, White believes that, all other things being equal, getting rid of feedback makes for better sound (if worse measurements), and speaker sensitivity goes up.

Lastly, White added that he and his team don't design around one system or one speaker. Instead, he brings newly designed gear to friends with different systems to make sure they work well in a wide variety of applications.

#### Let's Listen

Before I describe the sound of the Pallene and Dione I want to circle back to my concept of "transparency" vis-a-vis wine. When I discussed this with Jim White, he immediately got my point.

Let's briefly discuss two highly admired producers of white Burgundy. One is known for wines that have a distinctive style. They're rich, powerful, high in acid, and made in a reductive fashion (meaning with little oxygen exchange and a moderate dose of sulfur to ensure anti-oxidation). While each of his wines can be readily discerned as his *style*, interestingly they still express the different communes and vineyards where the fruit was grown.

The other *vigneron*'s techniques aren't radically different, but his lighter touch results in wines that are relatively dialed back, less "flashy" if you will, with a less obvious style. They too are quite transparent to the places they're from.

Both are damn tasty wines that any one of us would be happy to have poured for us. But they're distinctly different.

I'll now revisit my take on a product I reviewed earlier this year, the Zesto Audio Eros 500 Select monaural power amplifiers. The Zestos are highly sexy beasts—offering 250 watts a side of pure Class A tube-driven power. I loved the sound of these amps. They brought me massively high levels of musical enjoyment and hedonistic pleasure over the time I had with them and are among the best pieces of gear I've heard during my lengthy journey into the high end. If I could have afforded to, I would probably have purchased them, but they also take up lots of space in our small house and run hotter than the flames of Hades.

Like that first producer's Burgundies, the Zestos have a strong personality, while also readily showing differences among recordings.

The Aesthetix gear is more akin to the wine of the second maker. The Pallene and Dione lack such a strong signature—which, in a way, makes their sound that much harder to describe. They're very pure, not as overtly seductive, but nevertheless quite convincing, musically.

I'll start by describing my impressions of one recording that nicely illustrates much of what I found so appealing in this Aesthetix duo. Yarlung Records' marvelously natural live recording of Petteri Iivonen playing Bach's Violin Partita No. 2, one of the finest renderings I know of a solo acoustic instrument in real space.

When played through the Zestos (along with VTL's likewise tube-driven TL6.5 Series II Signature linestage), this record was pure liquidity. As I wrote in my review, "Iivonen plays a marvelous sweetly toned 1767 Gagliano fiddle. The upper register is honey-kissed, light and limpid as dew drops; the mid-to-lower registers are sweet, too, but with just the right edge of sandpapery grit. Heard through the Zesto 500, the entire presentation is exquisitely coherent, seamless from top-to-bottom."

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"I derive great satisfaction out of creating products that break price/ performance barriers."

By comparison, the Aesthetix pair is not as liquidly honey-toned but is still marvelously of a piece from bottom-to-top, still conveying that Gagliano's rosiny sweetness, warmth, and texture, along with a lovely expression of the subtlest dynamic shifts and musical curlicues. I also like that it seems just right in terms of instrumental scale, making the impression of the fiddle's body size, as I expect from this LP, into a highly convincing replica of a solo violin performed in a real venue. It's a slightly drier but by no means cold presentation.

Radically switching musical gears, listening to the classic Maazel Decca recording of Gershwin's *Porgy and Bess* led me to Janis Joplin's cover of "Summertime" on Big Brother & The Holding Company's *Cheap Thrills* (MoFi 45). I'd forgotten the clarity MoFi's mastering brings to this LP, digital steps or no. It's appropriately raw, upfront, and viscerally thrilling as Janis and this band were. "Ball and Chain" also benefited from the Dione's hefty 280 watts of output power into the 4-ohm loads of each of the speakers used during the review process. The music is so totally *there* in all its funky, unrefined glory, with plenty of air in the reverberant space, in-your-face dynamics, incendiary fuzz-soaked guitar solos, and Janis' impassioned vocals slicing through the air like a celestial buzz saw.

As analog is my preferred playback medium, I don't play many CDs these days, and streaming is something I do mostly in the car, at the gym, or at work. Hence, I use the good if not state-of-the-art Bluesound Node 2 at home for more causal listening. But feeding the Pallene's excellent DAC module via the Bluesound's coax out has brought the sound of higher-res sources to a whole other level for me. Right before deadline I learned of Phil Lesh's passing and had the urge to play *Live Dead*. But not being able to locate my vinyl copy I streamed it through Pallene's DAC to impressive results in definition, clarity, and tonal naturalness, as was immediately apparent during the subtle, jazz-like "Dark Star," as Lesh's brilliantly nimble bass work sets the theme, weaving hypnotic magic with his bandmates throughout the tune's myriad pathways.

Moving to a full-throttled orchestral workout, the legendary Mercury recording of Stravinsky's *Firebird* with Dorati and the London Symphony offers a marvelous open-aired window on the performance. With the Pallene and Dione the presentation was notably neutral—straddling the line between super-revealing and detailed and tonally as close to dead-center as can be—neither overtly warm nor cool sounding. Which is tricky with this recording, as Mercury's are famously on the brighter side of the tonal spectrum (though this Classic Records reissue is less so).

And Stravinsky's score covers the range, from the rumble of the opening double basses to the upper reaches of violins, winds, and percussion. The solo violin parts sing sweetly, the bases purr and growl as written. Flutes and piccolos flutter, horns announce transitions with their distant hollow brassiness.

Spatially this recording is about as good a test as one can conjure. And the Aesthetix gear does a mighty fine job of stepping aside and letting this great recording strut its considerably impressive stuff. The stage is very large, while seemingly just right proportionally—front to back, top to bottom—a damn fine rendering of a large orchestra. Dynamics are likewise on excellent display here. From the quietest chamber-like passages to the full-on brass and percussive assaults, with those famous shake-the-rafters bass drum thwacks. There's no tonal fat, to be sure, but, at the same time, the sound isn't lean and never edgy. More like a svelte, muscular athlete.

Thrilling stuff.

#### **End Point**

White ended our conversation with an interesting point that I found refreshing and one that nicely sums up the value I find in Pallene and Dione, a value I find that much more impressive given the obvious care that Jim and his team put into all things Aesthetix.

"Even though I enjoy designing equipment at the bleeding edge, I also derive great satisfaction out of creating products that break price/performance barriers." **135**