

Equipment Report



PrimaLuna EVO 300 Hybrid Integrated Amplifier

Dutch Treat

Dick Olsher

It was finally the right time. After a multi-year development effort involving PrimaLuna and sister company Floyd Design, the EVO 300 Hybrid was released in the fall of 2021. It represents a departure from PrimaLuna's all-valve amplifiers in that it marries a PrimaLuna EVO 300 preamp stage with a MOSFET power amplifier. It was Floyd Design's Jan de Groot, whose credentials include 26 years of MOSFET circuits, who finally got it just right. Parent company Durob Audio's CEO, Herman van den Dungen, poured his heart and soul into this project with the goal of combining the virtues of tube and solid-state amplification—in other words, to produce the best hybrid possible. He realized that this meant a more expensive unit, but is confident that the end result clearly justifies the added expense.

The familiar sextet of 12AU7 dual triodes sits prominently at the front of the Hybrid. Designer Marcel Croese, former chief engineer at Goldmund, has gone to great lengths to minimize noise and enhance microdynamics. The two triode sections of

The first two triodes provide voltage gain while the third is configured as a cathode follower. The first input stage comprises the two middle tubes, labeled V3 and V4.

The solid-state amplifier sections use complementary n-channel and p-channel devices to achieve push-pull drive. The JFET drivers are sourced from Linear Systems, a leader in low-noise JFET technology, while extremely linear and rugged Exicon MOSFETs are used in the output stage. Due to space and heat-sink constraints, power output has been limited to 100Wpc into 8 ohms (160Wpc into 4 ohms). The circuit layout is largely dual mono and includes two power supplies with separate toroidal power transformers for the preamp section, while the power stage uses a dedicated 500VA transformer. There is also an "AC Offset Killer," a feature common to the EVO line, which eliminates DC offset at the AC mains input and is effective in eliminating potential mechanical transformer hum. Quality parts are used throughout, including Japanese Takman resistors, signal-path caps that are either polypropylene or tin-foil types, and an ALPS Blue motorized volume pot.

The EVO Hybrid is designed with extensive protection circuitry. The delayed switch-on takes about 60 seconds to complete and is controlled by a microprocessor for optimal timing of the tube preamp and MOSFET stages. During this time the outputs are muted to protect the loudspeakers. The output stage is also protected against DC-offset, oscillation, and short circuits.

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each 12AU7 are connected in parallel, reducing the triode count effectively from six to three per channel. Each paralleled 12AU7 has the same gain as before but with higher plate dissipation and increased transconductance.

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Specs & Pricing

Power output: >100Wpc (typical 115 watts) into 8 ohms;

>150Wpc (typical 170 watts) into 4 ohms

Frequency response: 10Hz–80kHz, ±3dB

THD: < 0.2%, 100W @ 8 ohms

S/N ratio: -105dB (A-weighted)

Input impedance: 34k ohms

Input sensitivity: 415mV

Total gain: 37.2dB

Damping factor: 160 at 1kHz

Power consumption: 99W (no signal in)

Dimensions: 15.9" x 8.1" x 15.2"

Weight: 59.5 lbs.

Price: \$7295

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Associated Equipment

Speakers: Fleetwood Sound Company DeVille; Audio-static ES-240; Innersound Isis 3.5

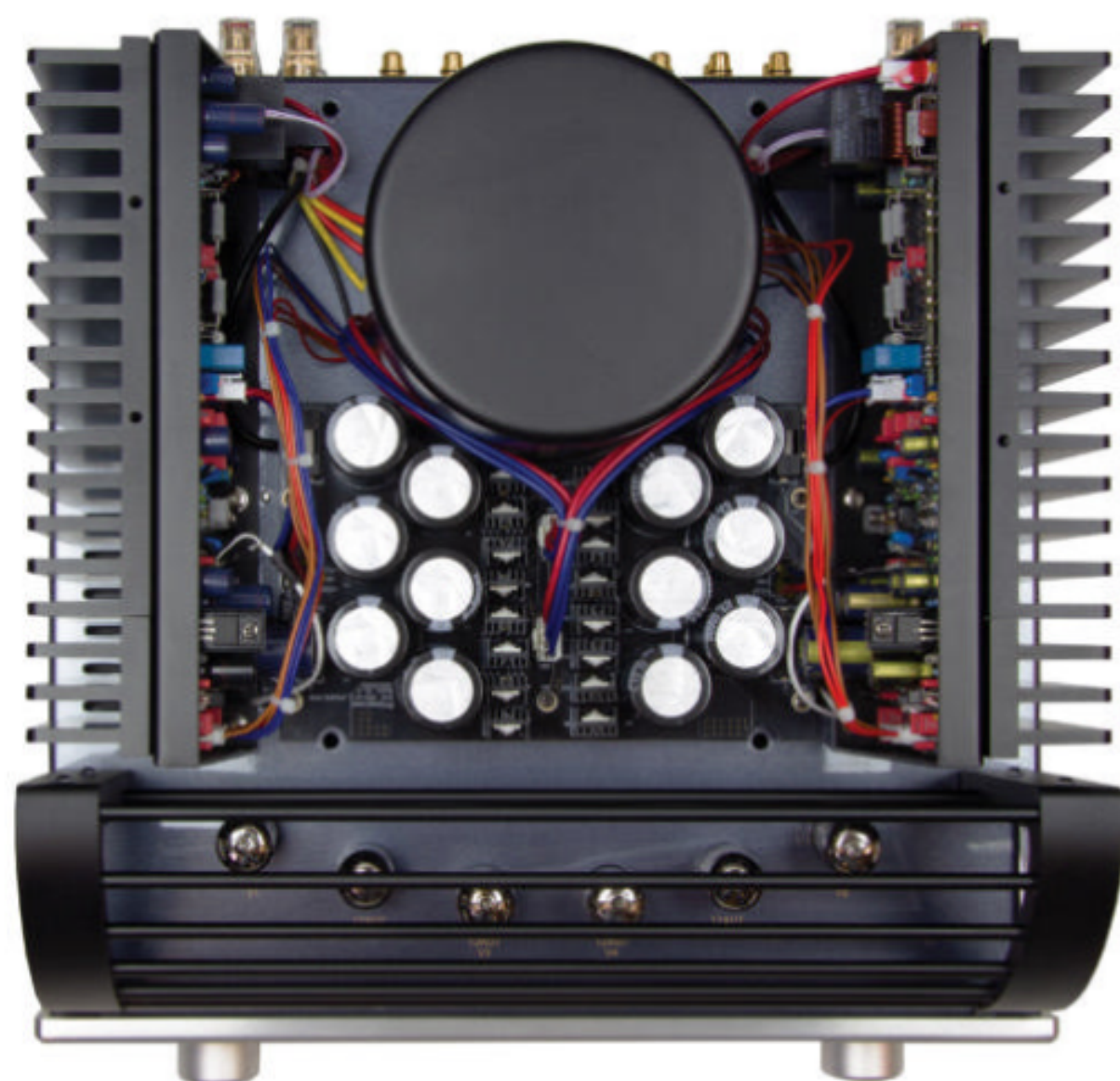
Analog source: Kuzma Reference turntable; Kuzma Stogi Reference 313 VTA tonearm; Clearaudio daVinci V2 MC Phono Cartridge; Sound Tradition MC-10 MC step-up transformer; Pentagon, Upgraded Rothwell Simplex & TPAD 1000 phonostages

Digital source: Denafrips Terminator DAC; Qobuz streaming via Alldaq ADQ-USB 3.0 isolator

Cable & interconnects: Acrotec, Mogami & Kimber KCAG interconnects; Acrotec 6N, Analysis Plus Oval 12, & ChromaLeaf Mogami speaker cable

Accessories: Sound Application CF-X & TT-7 power line conditioners

Six RCA line inputs are provided, one of which is a home-theater bypass. In addition to a tape output there is also a subwoofer output that is switchable between stereo and mono. The subwoofer out is in effect a preamp out, so it has no built-in crossover. It could be hooked up to a single powered sub, pair of powered subs, or an external power amp that would drive a passive subwoofer. The EVO Hybrid is switchable between speakers and a front-panel headphone jack. Be sure to first plug in your head-



phone and turn down the volume before flipping the switch. There is no balance control, but as “compensation” a hefty remote control is included, which allows for both input selection and volume control.

Every EVO Hybrid comes standard with an additional piggyback chassis mounted on the bottom plate that is intended for the installation of an optional moving-magnet PhonoLogue board (\$250). PrimaLuna USA’s Kevin Deal informed me that, if requested, this would be performed at Upscale Audio, as it requires soldering. With the current proliferation of external phonostages, it’s likely that most users would prefer to go the external route. I obtained excellent results, principally laudable dynamics and detail resolution, with the upgraded version of the Rothwell Simplex mm phonostage (\$499), available from Brit Audio.

It was Harvey Rosenberg, aka Dr. Gizmo, who was responsible for the first commercial tube/MOSFET

hybrid, marketed by NYAL circa 1984 and dubbed the Moscode—a concatenation of MOSFET and cascode. George Kaye, who oversaw the Moscode project, designed the circuitry which included a tube driver and tube power-supply regulation. In hindsight, these amps were not entirely successful, possibly due to the quality of the MOSFETs available back then. I should know, as an owner of a Moscode 600, which I have had upgraded with only limited sonic success. In fact, I haven’t been completely happy with any hybrid amp I’ve auditioned over the years. It seemed that a proper marriage of tubes and MOSFETs was an elusive technical quest whose time has yet to arrive. That changed dramatically with my first listen to the EVO 300 Hybrid amp.

It is my standard operating procedure to evaluate a power amp in the context of several speakers to assess its compatibility and performance with a variety of loads. First up was

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the Audiostatic ES-240 full-range ESL, which is exceptionally revealing of textural purity and timbral fidelity. Being quite inefficient, the ES-240 normally performs best with a high-power, high-current power amp. Yet, the PrimaLuna had no difficulty negotiating this load—certainly a good first impression. It projected a dimensional and well-focused soundstage with a solid orchestral foundation. The overall tonal balance was on the mellow side of neutral, lacking a bit of energy through the upper midrange. This was the only time during the review process that I felt tempted, in fact compelled, to roll in tube substitutions for the gain tubes (V3 and V4). With both the Innersound Isis 3.5 and Fleetwood Sound DeVille, the stock tube complement sounded best. In hindsight, the EVO 300 Hybrid is voiced just right for most modern speakers, which tend to feature lively or, dare I say, slightly bright upper octaves.

So, don't be in a rush to roll in any vintage tubes, as the stock hand-selected Psvane 12AU7s should perform well in most systems. In the case of the ES-240, vintage tube substitutions proved helpful in contouring the tonal balance to my liking. My favorite turned out to be a Mullard CV4003, which improved timbral fidelity of female voice by virtue of a more vivid upper midrange. So configured, the EVO Hybrid was transformed into a remarkable performer, being sure footed in negotiating complex musical passages. It was capable of eliciting gloriously rich harmonic textures and realistic tonal colors. By now it was clear that the EVO Hybrid sounded nothing like a typical solid-state amp. It was tube-like in essential respects, but with more speed and bass control than an all-tube design. An example of its magic was evident in its delivery of one of my favorite Tori Amos tracks, "Over the Rainbow," recorded live during her Dew Drop Inn Tour of 1996. Her unique vocal technique of whispering and breathing into the mic was never more expressive or hauntingly moving. It was reported that Tori appeared to be going through some form of therapy on stage; maybe so, but it was definitely therapeutic for me.

Enter the Fleetwood Sound DeVille. An easy 8-ohm load and a sensitivity of 94dB help explain why this was the speaker that the EVO Hybrid fell in love with. The result was fabulous dynamics and low-end solidity. Especially with analog sources, soundstage depth and width perspectives were remarkably spacious. Just for fun I cycled through several turntables in my collection. It was impressive to note how easily the EVO Hybrid and the DeVille revealed the tonal characteristics of each turntable/cartridge combo. For example, the amazing midrange projection and clarity of a Garratt P77 mm, probably one of the best mm cartridges to ever grace the planet, were on full display. Resolution of low-level detail was also a strong suit. Some solid-state amps artificially enhance detail resolution by etching or brightening harmonic textures. The EVO Hybrid never resorted to cheap tricks. No artificial ingredients here. Its presentation flowed organi-

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cally and sweetly, but without the overly liquid textures and excessive second-harmonic distortion coloration typical of some vintage tube amps.

When it comes to value, it's important to keep in mind that the EVO Hybrid is an integrated amp, and as such, it combines a preamp, headphone amp, and power amp in one chassis. Headphone listening isn't my thing; I don't even own any world-class cans. But a listening session with my trusty Sennheiser HD 600 turned into a most pleasant experience by virtue of the amp's superb purity of tone. Taken separately, the preamp, basically an EVO 300, and the headphone amp are worthy of a recommendation. But the real magic is in the integration of the tube and solid-state sections. At last, PrimaLuna has delivered me to the promised land—a hybrid power amp that not only excels at the frequency extremes but is also capable of considerable tube magic.

When is an Evolution a Revolution? Answer: when it's the EVO 300 Hybrid. This is the integrated amp I've been waiting decades for. It is neither bright nor texturally challenged; rather, it exudes musical finesse. And that means 3-D imaging and the ability to wow the listener with music's fire and drama. There's no need for any Zen meditation, the EVO 300 Hybrid simply allows me to close my eyes and get lost in a dimensional and engaging soundstage. A Dutch treat for the discriminating music lover! **tas**

