

Absolute Analog



PrimaLuna EVO 100 Phonostage

A Sonic Masterpiece

Dick Olsher

Tubes ahoy! The EVO 100, PrimaLuna's first stand-alone phonostage, posits a critical question: Are tubes always the answer? In this case, PrimaLuna's response is positively yes. The EVO 100 accepts both mm and low-output mc cartridges, and both gain stages are tube based. In particular, a tube-based mc gain stage is very unusual. It takes about 22dB of voltage gain to amplify a nominal mc output of 0.3mV to a mm level of about 4mV. Rather than use the conventional approach of either a step-up transformer or a solid-state circuit for generating an additional 20dB or so of gain, PrimaLuna opted for a 6922 dual triode gain stage (one tube per channel). Combined with the 40dB of gain generated by the mm stage that totals a gain of 60dB—more than enough for any mc, considering that line preamps typically offer at least another 10dB of gain. The 6922 sections are wired in parallel for reduced noise: The grid is grounded, and the mc signal is fed to the cathode while the output is taken from the plate. This type of circuit is ideal for an mc gain stage because of its low input impedance, wide bandwidth, and high gain. A nice feature is the front-panel adjustable mc input impedance over the range of 50 to 1000 ohms in five discrete steps. In order to maintain a low noise floor, the tubes are decoupled from the chassis using rubber dampers, and the entire mc section is tucked away inside the chassis, only accessible through a small panel on the back side.

the tonearm cable. As with all things audio, it pays to experiment. I should point out that the 12AX7 tubes are sourced from Psvane and the 6922 are Electro-Harmonix. These are matched and selected for low noise. All the tubes are shielded with aluminum tube shields to reduce radio frequency and other forms of electro-magnetic interference, an important design aspect when dealing with low-level signals. While it may be tempting to engage in tube rolling, I would strongly advise against doing so in the context of a phonostage. The EVO sounds great right out of the box following a basic break-in period of about 50 hours; so even from my perspective as an inveterate tube roller, I see no need to tinker.

Much of the unit's weight is tied up in a massive power transformer, which even incorporates a large 40-Henry choke for the power supply's filter network. The power supply is a tube lover's thing of beauty. First of all, there's full-wave tube rectification via a pair of 5AR4 rectifiers, each of which is wired in parallel. The power-supply circuit includes solid-state protection diodes against an internal short, as well as current-limiting resistors. The 5AR4 happens to be my favorite tube-rectifier type due to its low voltage drop and preservation of natural musical textures without yielding an excessive tube flavor. I can't at the moment think of another phonostage that uses tube rectifiers; everyone else in the universe seems to be wedded to solid-state diodes. I happen to agree with the PrimaLuna design team that tube rectifiers are more musical sound-

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Specs & Pricing

Output impedance: 100 ohms

Input: 1x stereo RCA

Output: 1x stereo RCA

Moving-magnet stage: 40dB gain; 47k ohms input impedance; 47pF and 100pF input capacitance (selectable)

Moving-coil stage: 60, 56, 52dB gain (selectable); 50, 100, 200, 500, 1000 ohms input impedance (selectable)

Tube complement: 2x 5AR4, 2x EL34, 4x 12AX7, 2x 6922

Dimensions: 11" x 7.5" x 15.9"

Weight: 27.9 lbs.

Price: \$3695

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Associated Equipment

Speakers: Analysis Audio Omega

Power amplifier: SMC Audio DNA-1/GT-21 Ultra upgrade

Line preamplifier: D Sachs Model 2, Topping Pre90, Velvet touch, Lector Audio ZOE

Analog source: Kuzma Reference turntable; Kuzma Stogi Reference 313 VTA tonearm; Clearaudio daVinci V2 MC Phono Cartridge; Technics SL-7; Revox B795

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

Accessories: Sound Application CF-X & TT-7 power line conditioners; Herbie's Audio Lab tube dampers



The EVO 100 is outfitted with a decent complement of controls and features, such as a mute switch and front-panel mc-impedance selection, and I should also mention the DC offset-killer in the power supply. However, in an effort to make the EVO affordable, at least by high-end standards, some features such as a second phono input, mono switch, and balanced outputs were omitted. Most of the unit's cost is reflected in the superb power supply and passive part selection, which includes Nichicon electrolytics, Duroch tin-foil caps, and high-quality ceramic tube sockets.

First in the queue to test drive the EVO 100 was my Kuzma Reference Turntable with the Clearaudio da Vinci V2 MC. I settled for a 200-ohm input impedance-setting on the EVO after trying a few other options. In my experience, the matching line preamp can substantially impact the overall sonic impression, sometimes positively due to synergy but also adversely. It was my plan to parade a number of line preamps into the system in order to assess the performance of the EVO 100 in various contexts. I started off with the Don Sachs Model 2, which is also tube rectified and allowed me to experience a pure-tube signal path all the way to the power amp. The result was absolutely delicious: buttery,

sumptuous midrange textures coupled with precise spatial resolution. Massed voices were transformed from a homogeneous spatial blob into discernible spatial outlines. Female vocals were given full emotional scope, a result of clarity of phrasing and brilliant resolution of volume and pitch modulations. There was a lyrical quality to the midrange that translated into gorgeous violin tone and intensified enjoyment of my favorite violin concertos. Bass lines were well defined and, even more importantly, so was the impression of a solid orchestral foundation. The lower midrange, especially the orchestral power range, the octave from 200 to 400Hz, is typically difficult to get just right. The sensation of tonal gravitas tends to be elusive, as many modern preamps produce a lean tonal balance. This combo nailed it with consummate conviction.

Since the Don Sachs line preamp could hardly be described as neutral, I next decided to give the Topping Pre90 a try. This preamp has been highly rated in some quarters based mainly on its superb measured performance, specifically vanishingly low distortion products. It certainly impressed initially, being highly transparent, dynamic, and exceedingly resolving. In fact, there was more low-level detail to behold, and bass lines were bet-

ing, and this in fact has been a major factor in my attraction to PrimaLuna gear over the years. And how about those EL34 power pentodes used as voltage regulators—I never thought I would run across power tubes in a phonostage. They are used to squeeze the last bit of AC ripple out of the filtered DC supply, and as such should last for many years. Much effort has gone into making the power supply clean, stable, and reliable in order to reduce the unit's noise floor, increase the overall signal-to-noise ratio, and result in trouble-free operation for many years. And yes, all the preamp tube filament supplies are DC and are also regulated. Kudos to the design team of Herman van den Dungen and Floyd Design's Jan de Groot for crafting something very special.

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ter defined. Transient speed was superb and harmonic textures were pure and unadulterated. So why did I become disenchanted with it in the long run? Some of the tube virtues I crave were missing. Notably, soundstage depth was diminished, and image outlines lost 3D palpability. Most distressingly, tonal color saturation was off. Even a simple SRPP tube preamp such as the Velvet Touch sounded more compelling musically.

The final preamp to be rotated into the system was the Lector Audio ZOE. HP was right about it many years ago. It is capable of unleashing stupendous macrodynamics. Designer Claudio Romagnoli made the ZOE into a tube roller's delight capable of accepting a variety of preamp tubes. I settled on the 6BK7, a high-transconductance tube much like the 6922/6DJ8 but rather inexpensive to source these days. The EVO 100 continued to impress: Orchestral tutti scaled impressive dynamic peaks without any discernible sense of strain or compression.

In every case, the sonic character of the line preamp shone through, meaning that the EVO 100 did not impose any heavy-handed coloration on the presentation. It wasn't tubey in a pejorative sense—it didn't obstruct detail resolution or blunt transient speed. It clearly improved the rhythmic ebb and flow of the music and nudged harmonic textures toward the real thing.

One of the main reasons I enjoy reviewing phonostages is that I get the chance to roll out some of my favorite linear-tracking tables in my collection. These include the Technics SL-7 and the

Revox B795, which always deliver a tantalizing time-machine trip back to the early 1980s. The former is outfitted with an Audio Technica AT-152LP mm cartridge sporting a Vivid line-contact stylus tracking at 1.5g. The Revox TT is set up with an Audio Technica 440MLa. Line-contact styli work very well in a linear tracker due to their negligible tracing distortion. With the EVO set to mm mode, these analog front ends sang sweetly with plenty of detail retrieval. In particular, the SL-7 exhibited a wide frequency response that made me forget about super-expensive mc cartridges. The synergy with the EVO 100 was that good. It just coaxed the best possible sound from every analog front end I matched it with.

For those of us addicted to tube sound, the EVO 100 is a godsend. It is easy to integrate into a system, serving up a luscious midrange without losing sight of detail, as well as image focus and 3-D soundstaging—tube gear's traditional strengths. This superlative phonostage is bound to elevate your vinyl playback experience to new heights. It has certainly magnified my enjoyment to the point where I just could not stop listening to vinyl. I can't think of higher praise than that. It is so good that, for now, I see no reason to spend more on a phonostage. It is without a doubt a sonic masterpiece! **tas**