True innovation from Italy: Pathos has come up with a unique valve/MOSFET hybrid

by KEN KESSLER

During the worst — no, make that "during the most obsessive" period of my audio affair with Italy — a pompous British wag railed at me that the country’s entire industry suffered from a lack of imagination and a fetish for retro. He argued that, gorgeous styling aside, the Italians contributed nothing whatsoever to our passion and that I was guilty of glorifying a "packaging job". Suffice to say, he was a misspent decade of bawling two-way loudspeakers.

Although I cited Unison Research’s stable and affordable single-ended triode amps, GRAPA's success in making OTL amplifiers which work in the real world, Sonus Faber’s patented crossover in the Extrema and its prescient sub/sat system of over a decade ago, Audio Analogue’s under-priced electronics and more, he was unmoved. Now that the dispute is long-forgotten by my detractor, I find proof-positive that the Italians do innovate.

Why it took this long for me to get around to reviewing a Pathos product is down to distribution. But now that Pathos is handled here by Italy’s virtual British-based embassy — UKD — I need wait in torment no longer. Did I say torment? Sure did: the Pathos goodies are among the sexiest, sleakest, most beautifully-assembled gems I’ve seen this decade; admiring them at shows for years but having to decline the offer of a review has been torture indeed.

On the surface, the Pathos Twin Towers could be described as a tube/solid-state hybrid, and our friend above could argue, “So what’s new in that?” But Pathos developed a topology to make it behave quite unlike most of the hybrids I’ve heard. With rare exceptions like the Radford TT100 (solid-state front-end but tube output), most hybrids use tube drivers to add a frisson of valve-like warmth... (I’ve now settled into acceptance that I can never be Italian...)

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Twin Towers is proudly named after an American architectural achievement. The company name is inscribed in this context if you look up the meaning to sketch play.

Suppliers

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The Secret of INPOL

NO SARCASM, please, for the lack of a circuit diagram: INPOL is a trade secret, so the company does not offer diagrams to reprint. In the most dry-roasted of nutsheils, INPOL is a pure Class A, single-ended, zero-negative-feedback output stage using power MOSFETs ‘current sourced’ by a large inductor and loaded in parallel with a capacitor.

As you’d expect, the latter, while acting as a ‘passive’ current regulator, prevents DC from reaching the outputs. A pair of E83CCs/12AX7s serve as the drivers, and they mate with INPOL in such a way as to determine pretty much its entire sonic signature. Given the near-ubiquity of the ECC83 and its variants, the sound can almost be described as all things to all tube crazies — both modern and vintage, all at once. A mix of both strengths and weaknesses, INPOL’s downside is relative inefficiency and hot-to-the-touch running (if not quite as poor in these areas as traditional Class A transistor amps), the requirement of a massive power supply and the need to face an impedance of a nominal 8 ohms. Pathos recommends 5–6 ohms and above, and you will hear it cry if you connect it to anything dipping below that. INPOL also means that the Twin Towers bears no protection circuitry, so please, be nice to it.

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The Twin Towers’ edges are solid rosewood. At the back, a row of beautifully appointed, gilded sockets accepts four line sources plus tape-out (a phono stage is in the planning), alongside an earthing tag, hefty multi-way binding posts, two user-changeable fuses and an IEC mains input. Beneath? Massive cones at each corner. All straightforward, but ask your dealer to unload the thing. Packed in a reassuring solid wooden crate, the Twin Towers is not something to be installed on one’s own. Its overall dimensions are a manageable 482x300x450mm (whd), but they hide a backbreaking 32kg weight.

A curved front plate contains but two rotary controls; recessed below are an on/off toggle switch and a red power-on LED indicator. At the right are the input selector and the rotary volume control, sited on either side of a small display. Here’s where the palms grow moist and where even rivals are driven to utter an involuntary ‘Cool!’: the Twin Towers comes with the sleekest volume-only remote I’ve ever seen, a wand made from rosewood and gold-plated metal, bearing only up and down buttons in the form of tiny gold stars. The window in-between provides a numerical read-out of the level setting in bright red.

It’s here that I must bring up the price tag because the model I’m describing is the top of three versions of the Twin Towers. But, as the price difference between the mini going the 24-step entry model, the same-plus-remote and this, the remote control-with-64-step-resistor volume control, is only £325, or 10% of the £3250 total, the lesser models are not being imported. The volume control is made in-house by Pathos, using 1% metal layer precision resistors, driven by a bank of vacuum valve relays with thorium contacts. Internal wiring is silver. The
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The act of level setting has its own by-product: audible clicking which at first seems out of place with such a refined device. But you soon find yourself running up and down the volume scale just to hear those clicks, reminiscent of the finest mechanical cameras running on long exposures. Yummy...

Pathos rates the Twin Towers at 30W/ch into 8 ohms, with frequency response stated as 1-100kHz, +/-0.5dB, and signal-to-noise 90dB. In keeping with the company's direct and implied recommendations, I stuck with non-difficult speakers (LS3/5As, the old Quad ESLs and Tannoy Rs), and used silver or silver-hybrid wiring. And I'll be damned if it didn't 'synergise' better with silver than copper.

And, oh! will you hear nuance and detail — naked enough to help you to assess wire. This amplifier is so quiet, so delicate, so transparent and so refined that I had to check and make sure I wasn't listening to some ultra-precious, non-300B SET. Note that I said 'non-300B'; I make that distinction because the Pathos does not pee on its part of the valve tree by dialling in excessive warmth in the mid-band. In this respect, it sounds so explicitly like a modern tube amp of the Audio Research/C-J variety that anachrophiles might take it as an affront. But then, in keeping with the benefits of being a crossbreed, upstairs it demonstrates a vintage tubey-nose through the kind of silky, sweet, shimmering trebles you rarely hear this side of a Quad II or a Leak TL12. Call it audacious use of retro if you must. It's so luscious that a part of you wants to go into deep, irrecovable denial, the kind of psychological state which puts a Porsche in every shrink's garage: you just will not believe that the guts of this baby are solid-state.

Then the bass kicks in and you just know that no tube amplifier — unless penned by, say, the iconoclastic Tim de Paravicini — could provide the sort of damping, slam and bass extension that oozes from Twin Towers. It's not that the sound is particularly transitory; it's more a case of us never expecting a tube amp to deliver such chunky, authoritative lower registers. And the all-tube amplifiers which can match or better the big solid-state amps tend to be rare, expensive or huge. Think Audio Research Reference 600, the classic EXAs with 909 tubes or semi-pro units bearing a bushel of 6550s.

But, please, keep in mind that this is in the context of easy-to-drive speakers with sensible impedance and relative efficiency. I didn't dare try the WATT/Puppy system 5.1 or the little ALR Entry 2s. So, in a curious way, you have to treat the Pathos as you would an SET: fit mainly for sensitive, kindly speakers. If words like 'kind' and 'sensitive' suggest New Male warmth-and-fuzziness, please, spare me: we're talking about Italianate behaviour here, not Californian.

Tracks like Dino's 'Sort'era Cela de Roma' or Willy DeVille's 'Assassin of Love' showcase its rich vocals, correct dynamic contrasts, speed to cope with non-sequitur transients, and a soundstage so deep and wide that you'd expect pigeons to drop down for a feeding. Try sparser works — solo piano courtesy of Otis Spann, for example — and you learn all about the intimacy denied us by systems which overwhelm.

Twin Towers is one of the finest amps I've ever heard, regardless of price. Had I not just sunk my life savings into my listening room, I'd be buying one right now. The Twin Towers is almost too good, too innovative, too classy to be true.