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INSIDE ABBEY ROAD: Rick Visits Alan Parsons

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This month's column is devoted to the Pathos Acoustics Twin Towers integrated amplifier.

Good grief, what a name! To Italians, "pathos" apparently suggests emotion. According to one dictionary on hand, the original Greek means "suffering"—something audiophiles are fond of.

My Collins English Dictionary defines it as "the quality or power, especially in literature or speech, of arousing feelings of pity, sorrow, etc."

I don't know about the sorrow and the pity, but the Pathos Twin Towers integrated amplifier may be just the thing to end your hi-fi misery!

Three guys from Vicenza
Pathos Acoustics was founded in 1994 by three guys from Vicenza—Gianni Bordinato, Paolo Andriolo, and Gaetano Zanini. The Pathos Twin Towers ($4950 in its basic version, reviewed here) was their first product. Other products in the line include the Classic One integrated amp ($1150), and a battery-powered phono stage called in the Groove ($1150).

The importer, Richard Kohlrausch, of Hi-Fi Forum, is on a roll these days, what with Triangle loudspeakers from France, Audio Analogique electronics from Italy, and Final electrically tuned loudspeakers from the Netherlands.

"You may like it after a while," Richard said when he delivered the Pathos.

"You mean not at first?"

"It seems to take some getting used to."

He doesn't mean the amp has to break in. He means you do. (Actually, Richard cocked the amplifier for me in advance.)

Emotionally, the Pathos is the complete opposite of the Audio Analogique Puccini that I wrote about in December, which tried (successfully) to ingratiate with sweet tube sound, even though it isn't tubed. The Pathos is more Northern Italian than Southern. But if it sounds somewhat cool, I've warmed up to it—in a big way.

Palladio's home turf
Vicenza is the city where the renowned architect designed many buildings in and around town—palaces, villas, churches, and the city's town hall, known as the Basilica. If you tour Venice, as Mattia and I recently did, you might want to visit the churches of San Giorgio Maggiore and Il Redentore—two of Palladio's masterpieces.

Palladio aimed to capture the splendor and simplicity of antiquity. His designs have a cool, classic logic that exerted a strong influence on architects ranging from Inigo Jones to Thomas Jefferson.

There's more than a little of Palladio in the Pathos Twin Towers. As you can see from the photo, this is a work of art—a sculpture. Both Gianni Bordinato, the chief engineer, and Paolo Andriolo, who created the looks, are to be congratulated. Palladio would be proud.

Like the great renaissance architect, Gianni and Paolo aim for simplicity—a purity of sound and visual design. And just as Palladio took the Palladian style to the four corners of the world, Pathos has rewritten the rules of amplifier design.

The Pathos Twin Towers is an original.

"Don't listen with your eyes!"

That was John Atkinson's reaction when I started to enthuse over the Pathos Twin Towers.

Ha! An Englishman talking!

Ben, Giovanni—what's wrong with listening with your eyes? What do you think—that hi-fi equipment should be so ugly you want to listen with the lights out? So masculine, military, and intimidating that your wife won't have the slightest desire to turn it on?

Actually, I think JA would be impressed if he saw and heard this amp. And weighed it! We're not talking about flashy design with flimsy build quality here. There's substance along with style. Just lift the damned thing. But be careful—you might drop it. Eighty-eight lbs. This heavyweight champ ships in a wooden crate.

Amps by the pound
The Pathos Twin Towers is a heavy-duty integrated amplifier that stands its ground against the best of its type.
appear that you're paying a premium. Consider: At $4950 for the standard edition, the Pathos amplifier weighs in at a very reasonable $56.25/lb.

For comparison, the Bryston B-60 ($1495) is considerably more expensive at $67.5/lb. The Creek Acoustics $5950 ($59)/lb looks like a bargain, but tops the scale at $59.50/lb (still a bargain, though). And the Conrad-Johnson CAV-50 ($2495) comes in at $63.38/lb.

All that weight comes from several things. First, the massive twin heatsinks—the Twin Towers—which are necessary to dissipate the considerable heat from the Twin's pure class-A operation. The Pathos Twin Towers is rated at 35Wpc into 8 ohms, by the way. The amp draws 240W from the wall at all times, and, like all class-A amps, will run even hotter at idle than it will playing music at any volume.

Look at what appear to be three large transformers in the back—that's a good part of the weight. Actually, two of those “transformers” are inductors/coils. That's part of the unique circuit story, which I'll get to presently.

**Palladian cages**

Pathos must have soaked up all that Palladian architecture from childhood. The twin tube roundels—cages, if you will—out in front are well... Palladian. Inside reside two 12AX7 input tubes. On the sides, slightly in back, the twin heatsinks soar from the chassis like cathedral towers.

Manic financial analyst Marita watched as Richard and I uncured the amp. “Oooh,” she cried. “Ode to Penzance” (like it very much!) Richard could have sold it to her on the spot. Russians love things Italian; especially Russians from Marin's native city of St. Petersburg. Peter the Great hired Italian architects—chiefly Rastrelli and Rossi—to design the core of the city. The Palladian influence is very much in view along the banks of the Neva River.

Taking their cue from our pal Palladio, the three guys from Vicenza have done everything possible to eliminate clutter and to simplify. This goes for the circuit, too—starting with the fact that this is a “converged” design. There is no line stage. And—what a blessed relief after struggling to use my new DVD player—there are only two inputs.

The sound of the Pathos Twin Towers is as arcing as a Vivaldi concerto played in a Venetian church.

There is no balance control. No preamp-out jacks. And only one set of speaker binding posts—but good ones—so biwiring will have to double up. You want remote? The standard version with stepped attenuator is remote. But two remote versions are available. I’ll tell you about those later.

**Solid-state punch**

I tried the Pathos Twin Towers with a number of speakers, including the B&W CD101 SE, Triangle Zephyr II, Verity Audio Fidelio, and Audio Physic Step 4. As a finale, I used mainly a Micromega Stage 6 CD player.

With the B&W CD101 SE, the three guys from Vicenza scored decisively over and Fred from Pisa. Okay, Santa and Fred's little gem, the Audio Analogue Pianino SE, costs a mere $195—$195—a pittance compared to the price of the Pathos. The Pianino SE is a great buy—you can have it for a song. Or an aria. The Pathos Twin Towers is in a different league, though. At more than four times the price, the Pathos sounds more open, airy, delicate.

And the bass?

This is a tube/transistor hybrid design. The bass is definite solid-state: tight, with astonishing speed and control. But the transparency took my breath away.

Not right away, mind you. At first, I found this amplifier a little cool. If Palladio had designed audio products instead of buildings, this is the kind of sound he probably would have aimed for: harmonically rich—but not overripe. The ears adjust over time. Mine did, anyway.

My moment of truth with the Pathos Twin Towers came on high voltage swings with very low distortion. Acappella’s "Some of These Days" (Philips), a recording I take to be the ultimate test of a loudspeaker system. The Pathos Twin Towers would have been happy to be a part of it. Whether you want to hear it.
Current, of course, is another matter. That's where tubes — we're talking output tubes now — typically pop out.

You do have to remember, though, that the power rating of the Pathos is 35Wpc into 8 ohms. Avoid very insensitive speakers and crazy low-impedance loads, listen at reasonable volume levels, and you may find that the Twin Towers can shake you out of your seat — or at least out of your complacency.

I hadn't realized that the B&W CDM1 SE or the Triangle Zephyr II could go so low. I easily got an extra half-octave of surprise bass extension from both speakers — compared, say, with the Audio Analogue Piccini SE or the various single-ended tube amps I had on hand.

**Single-ended**

A new amplifier circuit design. Big deal. I hear your skepticism. After 15 years of writing about hi-fi, I, too, have become yoked — as my Swedish friend Lars likes to say — about new miracle circuits.

But something special is going on with the INPOL circuit. And when I looked into what's actually going on, I thought: No wonder!

For starters, the INPOL circuit is single-ended push-pull. Only the input stage is tubed — those two 12AX7s. The output stage is solid-state. There are three — that's right, three — MOSFET transistors per channel, running class-A, single-ended. (For push-pull, you'd need transistor pairs.)

St. Borsnato uses only NPN (negative-emitter, positive-collector) transistors. According to Gianni, NPN transistors sound better than PNP transistors. And when you pair NPN transistors with PNP transistors (as is usually done in push-pull solid-state amps), you must

So how does St. Borsnato get 35Wpc from three MOSFET transistors per side while running them in single-ended class-A?

He goesos the juice with inductors. Remember those three "transformers" at the back of the amp, two of which are not? The middle one actually is a transformer — the power-supply transformer. The other two blocks, to the sides, each conceal one massive coil.

The tubed input stage of each channel feeds into a transformer, which in turn controls a large inductor. Each inductor acts as a current generator — going the juice in concert with the three parallel output transistors per side.

According to Gianni, the inductors double the voltage swing and this doubles the efficiency of the output transistors, making them "50% efficient instead of 25% efficient, as with pure class-A amplifiers."

The output impedance, by the way, is very low at a stated 0.07 ohm. Typically, an SET tube amp has a much higher output impedance (1.0 ohm or greater). This will affect the frequency response with certain loudspeakers — boosting the midrange, perhaps, and rolling off the highs. You should have no such problem with the Pathos Twin Towers.

For all its innovation, the circuit is very simple. "The less the signal is manipulated, the more the sound keeps

Any downside to the INPOL circuit?

You can go only so far, power-wise, with this approach before practicality and economics kick in. With class-A, if you want much more power than 35Wpc, you're talking about a great deal more heat — and heat-sinking — to go along with it. At 88 lbs, the Pathos Twin Towers is already about as heavy as you'd want a stereo integrated amp to be.

For various reasons, the circuit doesn't work well at higher output levels. You're asking for too much voltage swing from the input tubers, the inductors can go too weak, and so on. So 35Wpc is about it.

You'll note that the Pathos Twin Towers is not power-rated into 4 ohms. I wouldn't let that scare me — I had no difficulty driving such nominal 4 ohm speakers as the Audio Physic Step SE and the Triangle Zephyr II. Still, I'd avoid insensitive speakers, particularly those whose impedance drops much below 4 ohms.

**A real sesame open-up**

Lars visited last night and had a listen. He was impressed by the Pathos Twin Towers. He seemed to enjoy himself.

"Transparency like that is a real sesame open-up," he opined.

"A sesame open-up?"

"I said something wrong?"

"It's 'open sesame,' I believe."

"Not in Swedish."

For me, the Pathos amp represents an exciting alternative to single-ended triodes — a real sesame open-up! Did I say alternative? Perhaps the SET tube amps should be considered alternatives to the Pathos Twin Towers.

Why do SET amps, as a rule, sound so transparent, so live, so immediate?

For several reasons. SET amps operate in pure class-A. There is no "match distortion" switching into class-A-B. There is no splitting of the waveform — that's what single-ended means. And with most SET designs, there is no overall negative feedback — or you can dial it out. These are the very same reasons the Pathos Twin Towers sounds the way it does.

And consider the advantages of SET. There are no expensive (up to $800 per matched pair) output tubes to replace. You're much less limited with regard to

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Hi-Fi Forum, E.O. Box 570, Clarksburg, NY 12921, or P.O. Box 1217 Greene Avenue, Montreal, QC H2J 2T1, Canada; Tel: (800) 771-8729 (from US), (514) 932-
Spatial resolution. The freedom from listening fatigue.

Have you heard the Sing We Christmas CD (Teldec 94563-2) by the vocal ensemble Chanticleer? The sense of space on this recording is superb—as is the overall resolution. With the Pathos Twin Towers, every syllable was clearly and cleanly reproduced—almost as if live—and much in the manner of a great single-ended triode tube amp. This is not the rich, romantic SET sound, though. Even running single-ended with no negative feedback, solid-state output devices are not going to sound like a 300B or 2A3 output tube. The Pathos Twin Towers may be more neutral, though.

Marina and I just returned from a concert by the New York Wind Ensemble. The group’s wonderful bassoonist, Frank Morelli, is featured on a number of recordings by the Orpheus Chamber Orchestra. I decided to compare Mr. Morelli live with Mr. Morelli on disc, via the Pathos Twin Towers. I can tell you that the sound is very close to what I just heard live. In fact, maybe this is as close as it can get.

Twin Towers has a stepped attenuator with 23 steps in 2dB increments. Each of its 23 positions has only two resistances (1% metal layer) in the audio signal path.

The Pathos Acoustics
Twin Towers amplifier
is an original,
a sonic and visual masterpiece.

A remote-control version is available for the same $4950, but no one is pretending that its sound quality is quite up to that of the stepped attenuator. For that, you need the optical Reference Remote edition ($5700).

An onboard phono stage used to be an option but no longer is, since most people who wanted phono opted for Pathos’ In the Groove outboard phono stage ($1195). I didn’t have a chance to groove on it myself, but I did do some analog listening through Tim de Plogg and retooled the rules of architectural design. Gianni and Paolo rewrote the rules of amplifier design. They started with a clean sheet of paper. The Pathos Twin Towers appears to represent a completely fresh approach—something all too rare in hi-fi products.

It succeeds brilliantly—more so than any of the other single-ended solid-state amplifiers I’ve heard. Like any great piece of hi-fi gear, it succeeds on its own terms. It is very convincing. I can’t point to any weaknesses—except, perhaps, the relative lack of liquidity when compared with certain single-ended triode amps. But, like I say, the Pathos may be more neutral.

If you’re a SET fan, you still may prefer the romance and the richness of a 300B or 2A3—or of a great push-pull tube amp like the Conrad-Johanson CAV-50, for that matter. But the Pathos Twin Towers is something you should hear…and see. It’s an original, a sonic and visual masterpiece.

Marina and I are purchasing the Reference Remote version for use in our living room.

You can listen to “Louie Louie” every day for the next ten years and we guarantee you’ll break down (before we do).

Ten-Year Limited Warranty
Parasound products have always had a reputation for superior quality and now our ten-year limited warranty backs it up. See your Parasound dealer or visit our website for the details on a warranty that’s sure to stand the test of time—and taste.