

Amplifiers, Reviews

## Pass Labs XA25 review

by



Sarjan February 21, 2023, 17:34



*Pass Labs XA25 remixed. This is the first review in a new series of syndicated content. Called Remixed, it features reviews previously published on 6moons which John Darko deems of interest to his own audience. So they've been rewritten by the original author to suit darko.audio.*

Rewind six years not moons. Nelson Pass has finalized what will become the XA25 stereo amp. The model name reflects 8 $\Omega$  wattage so demure modesty for transistor power. Rather more brutishly, it then keeps doubling down to 100wpc into 2 $\Omega$  and even remains stable into an eyebrow-raising 0.5 $\Omega$ . That parks it somewhere between the low-power FirstWatt and burlier Pass Labs ranges. Closer to the former being is what Reimyo's designer Kiuchi-San once called single-ended operation for his €20K 200wpc KAP-777. Though technically a misnomer, he referred to the most minimalist possible push/pull outputs using a single device per phase half. Like amplifiers from GamuT and Gato, that's true also for the XA25 even though Nelson would never call it single-ended and confuse people. It's push/pull. Just so there's only one 800w/40A Ixys HiPerFet transistor per half wave so a total of four for stereo. That output stage is preceded by two more gain stages with

current feedback for a total voltage gain of 20dB, 47kΩ input impedance, DC-100kHz bandwidth, sub 50μV noise and 100V/μ slew. Packed into a 17×14.4×6" WxDxH chassis of 55lbs, our clearly muscular beast slurps 240 watts at idle. That spells out classic class A bias so expect its finned radiators to dissipate ~25C°.



More pertinent details include the avoidance of ballast or degeneration resistors between output device emitters and power rail. Nelson calls those another form of feedback that most amps claiming to be zero feedback overlook. Then there's DC coupling to eliminate signal-path capacitors. Just as pertinent is the company's conservative spec culture. My XA-30.8 rates at 30/60wpc into 8/4Ω but actually does 90/150wpc so virtually thrice when THD relaxes to 1%. Under the same allowance, the XA25 scales to 80/130wpc. Why wouldn't Pass simply say so?



Because they prefer to specify power at 0.01% THD+N. Contrast that to valve amps which use far looser 3% even 5% specs to hit power figures which their marketing deems vital to make actual sales. Clearly, not all watts are created equal. Since I just brought up our resident costlier XA-30.8, the XA25 triples its damping factor, reduces noise by 1/4th then doubles the slew rate. In short, it's a rather high-spec affair which on paper presents itself sotto voce and in the flesh in simple metal threads. More gently-does-it factors with Pass Labs's rather passive inflation

adjustment. The original \$4'900 bill of 2017 is \$5'150 for 2023. We can agree that most firms in our sector have applied far more aggressive corrections already. More sotto voce vis-à-vis my XA-30.8 manifests as less depth, height and weight. That makes for a rather easier amp to handle.



In fact, let's describe sonics by contrast to our resident from the same precinct. By coming from the same designer even sharing class A push/pull operation, I expected and got family resemblances; with differences. Well-recorded quite exposed vocals by Mayte Martin—I highly recommend her Tempo Rubato and Free Boleros albums —showed the XA25 to be slightly more sumptuous and juicy whilst microdynamics were livelier. That latter aspect suggested a faster circuit. With a singer like Mayte who knows how to turn from coquettish to brusque on a dime, there was more dramatic scaling. What's more, musical content in the soundstage's outer quadrants had more contrast ratio over against the soloist to suggest higher resolving power. Where my amp represents the bottom-up dense athletic archetype of a still compact but darker muscle amp, the XA25's lighter chassis allowed it to accelerate harder. Sorry for that automotive intrusion where a strong engine in a light 2-seater body equals quicker take-off. That quickening simply didn't steal from image density. It neither upshifted tonal balance nor thinned out textures. The musical climate remained moist. Dynamic responsiveness was simply quicker to create more and more pronounced ripples atop the surface of median loudness. A perfect proving ground for that was the rhythmically complex Arabian chamber music of the Khoury Project's Revelation. Like the two Curandero albums, the Khoury's title track not available on YouTube from the actual recording only a far inferior live cut is charged with peppery transients which spike in rapid-fire chess moves between the protagonists. Here the XA25 somewhat bridged XA-30.8 and my 1MHz DC-coupled German LinnenberG Liszt monos. Those belong to the open Autobahn type of class A/B amps which prioritize speed, incisiveness, clarity and PRaT over tonal redolence, relaxation and textural succulence. They go fast but not necessarily in the most comfort.



The XA25 remained closer to its XA-30.8 stablemate than the LinnenberG counter polarity but borrowed from it some extra reflexes. It simply stopped short of a big loan so it still would not peel out the scratchy aspects of the fiddle's bow work or the needly bits of the plucked lap zither to the same extent as the Germans. More unexpected was that vs the bigger Pass brother, the XA25 also had a small advantage of bass power and crack. Where it widely agreed was in its sweeter, lush handling of Jacques Loussier's piano Jazz trio fronting an orchestra on Mozart's N°20/23 Piano Concertos. It wouldn't be wrong to call that a respectful nod at generic valve expectations if we account for actual power tubes rarely being this linear, quiet and controlled. With massed strings, this nod meant more woody sweetness, less metal oscillated by horse hairs. Hence the LinnenberGs practiced stricter apartheid so crisper separation. The two Pass amps preferred enhanced sonority so a modicum of extra bloom. That's rather different from certain class D of massive negative feedback which can feel more damped, dry and clipped. Just so, the XA25 had admirable control over the hidden 10" woofers in their tiny sub-chambers inside my Audio Physic Codex 4-ways. The XA25 simply administered its clearly effective bass control without drying out the remainder of the bandwidth.



How about contrasting today's challenger to the FirstWatt F7, a smaller 20/30wpc into 8/4Ω class A push/pull amp? My choice of speaker rather played to the XA25's superior drive specs. Sonically this affected not just the bass region but the entire midband. The XA25 was more vibrant, energetic and propulsive, the F7 more introspective, matte, distanced and pale. On these speakers, the smaller amp with the lesser power supply spoke more to the mental observer perspective which counts the trees over yonder. The bigger more load-invariant amp packed decisively more come hither in the seat. In colour terms, the XA25 was more saturated with higher black values. The F7 injected more white. It's fair to call the XA25 earthier and more massive. But rather than darker which might suggest obscured detail, the XA25 was more resolved and teased out. Heavier mass coexisted with greater intelligibility. Particularly across the vital midrange, the XA25 combined gusto with multi-hued insight for a bit of inside-out glow action one hears SET fanciers rave about.

To play actual not imaginary valve games, I strapped on tightly regulated small 12AU/AX7 triodes with some negative feedback in Nagra's Classic Preamp with integral switching power supply and pristine 125dB S/NR. It took their injection of textural laissez-faire ahead of the more quicksilver LinnenberG Liszt to equal the XA25's textures when that was preceded by a Wyred4Sound STP-SE II whose active buffers for fixed impedance bracket zero voltage gain in the range I used it at. Think of it as an 'activated' passive preamp for when you need volume control but no sonic additives.



Based on actual comparisons, it's thus fair to say that the XA25 packs virtual Nagra-type small-bottle sonics in the areas of tonal bloom and the ability to track recorded decays. If now we return to Nelson Pass's 2017 design notes, these results would seem less due to the 'single-ended' use of his unusually potent Ixys output devices but what their use eliminated – typical degenerative feedback. It's how the XA25 differs from our XA-30.8; and apparently how it manages to eclipse it on subjective speed and suchness without sacrificing the usual markers of class A Pass tuning. We're told that scaling up this recipe to power ratings well beyond the XA25 won't be easy. In fact, I don't think it's happened yet. In that regard, buyers pursuing the smallest amp in the current Pass Labs catalogue actually get something the bigger ones don't have. It's bragging rights of a different

sort. Here it's not the guy with the heaviest costliest amp who wins but she who bought smarter speakers which don't require excess power so can exploit a smaller more sophisticated or purist gain circuit to drive them. In case you're still reading between the lines: had I discovered the XA25 before I purchased the XA-30.8 as my resident class A example, I'd have saved myself both money and handling fits. I like the sound of the smaller amp even better; and my back much prefers it, too.

**Postscript.** Should you wonder why a 2023 Remix of a 2017 amplifier, Pass Labs just offered me a review sample. In fact, Polish 6moons collaborator David Grzyb is just about to get his sample to write up for HifiKnights. The XA25 is very much current and, dare I say it, desirable.



### Written by Srajan

Srajan is the owner and publisher of 6moons. He used to play clarinet at the conservatory. Later he worked in audio retail, then marketing for three different hifi manufacturers. Writing about hifi and music came next, then launching his own mag. Today he lives with his wife Ivette and Chai the Bengal cat in a tiny village overlooking the estuary of Ireland's Shannon river at County Clare's border with County Kerry. Srajan derives his income from the ad revenues of 6moons but contributes to Darko.Audio pro bono.