

Pass Labs XA-200.8 Power Amplifiers | REVIEW By Dave McNair

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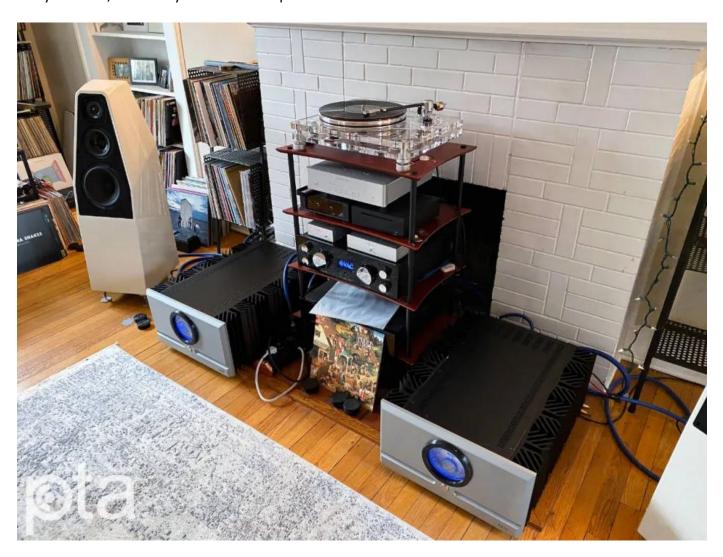
"I'm using some big ass mono amps, the Pass Labs XA-200.8. Ya know, the Class A ones."

Whenever I say that, in answer to a question from another audiophile, I get an interesting range of comments. Most responses are something like: "Oooooh. Yeah, those are killer." Or some variation of a truthful or convincingly feigned approval.

A few might say something like "Yeah. I don't know. They're cool, but kinda polite." Or sterile, bland, uninvolving—take your pick.

Words and Photos by Dave McNair

Once, someone NOT trying to be a jerk, corrected me to "the monoblocks?" To which I plainly replied yes, having decided I was not in the mood to speak of my disdain for the reviewer invented term monoblock. Harry Pearson, was that you that came up with monoblock? Or is it monobloc?



Don't Pass Me By

The Pass Labs <u>line</u> includes the X series (Class A/B) and the Class A series XA and XS amps. The XS sits at the top of the line. The XA series includes the single-chassis stereo XA-25 and XA-30, then the monoblocks, XA-60, XA-100, XA-160, and XA-200. The XA series has gone through several iterations with the .8 being where we are now. (First introduced in 2002 then updated to .5 status in 2008 and .8 status in 2014.)

Separate from Pass Labs products proper is the <u>First Watt</u> series of power amps. First Watt is designer and head honcho Nelson Pass' hand-built and self-described "kitchen table constructed" amplifier. Low powered, no feedback, with solid-state output devices chosen to emulate the transfer curve of a triode vacuum tube. Boutique without the price and pretension.

So why am I reviewing an amp that has been around in the version I have since 2014, with an already endless number of reviews? Because great HiFi products have no sell-by date and the Pass Labs XA- 200.8 sounds phenomenal. Also, the Pass Labs XA-200.8 has some special sonic attributes that just happen to work perfectly for MY purposes in my setup. Wait. Did I say monoblock?

Pass Labs amplifiers have been on my pro audio radar for quite some time now. The amps have enjoyed large acceptance in the mastering community. There are a couple of reasons for this. Prior to the popularity of self-powered mastering-specific studio monitors like models from ATC, many mastering studios used large, inefficient, or otherwise hard-to-drive loudspeaker systems. Many still do. Think Duntech, B&W Nautilus series, and a few others.

These speakers need lots of power and current drive capability. Pass, <u>Bryston</u>, Crown, Hypex, Mac, and Classe are common brands used in many mastering setups however, the common perception is that Pass Amps not only get the job done but have a hint of special audiophile sauce lurking in their neutrality that makes things a bit easier on the ear. I can definitely attest to that. The Pass XA series also make for joyful listening in an audiophile-specific context.



When I first started writing reviews for PTA, I acquired a pair of <u>XA-60.8</u>s. After a lengthy warm-up period, those amps rocked my world. They had probably been all around the world in various reviewer's systems,

so when I sent them back in for a tuneup, I was informed all the amps were on backorder but there was a pair of XA-200.8s available. Perfect. Partially because I wanted to give the Wilson Audio SabrinaX in for review as much love as possible. No, the SabrinaX don't need that much power but they do need some current muscle to live their best life, and the extra watts certainly didn't hurt.

Holy Moly, those XA-200.8s are huge. And heavy. No pain no gain, so I accepted the unboxing and placement task not with glee, but with resigned excitement. If the 157 pounds apiece doesn't get you, the cooling fins that run the entire length on either side, will. Dimensions are a deep 27.5" by 19" width and 11" tall. I should have put a "Marked Safe from the Pass Labs Amplifier Installation" meme on Facebook.

For whatever reason, with the new beasts in my system, the warm-up to nominal listening goodness didn't take that long—maybe three or four hours after that first power-up—thereafter 30 mins or so if left off for a day or more.

I've read lots about how great the XA-60.8 sounds, it certainly did during my time with 'em, but these Pass Labs 200.8s were a whole new ballgame. The sound was immediately assured in an almost regal way. As in "I'm the King, I'll take care of this little Mad Cow thing, y'all just chill."

I'll talk more about the sound in a minute. First, let me do some tech bizness along with a smattering of hosannas for the man himself, Nelson Pass.



Pass Me Another One, Just Like The Other One

Nelson Pass' massive contribution to the art of solid-state amplifier design has been written and blogged about ad infinitum. I might as well add to the pile. The dude lives and breathes amp design. Some folks may not know that Nelson started out in speaker design at ESS working with Oskar Heil — and this was during his college days at UC Davis getting a BA in physics. Whoa. Did he have to schedule beer drinking and college antics? I guess some of us are a bit more *focused* than most.

After college, he formed Threshold with Rene Besne. With their first official product being the Threshold 800A, high-end solid-state amp design took a big step towards emerging from the Dark Years. Or should that be The Brittle and Edgy Years?

After selling Threshold, in the mid-eighties, he designed the affordable and much-loved Adcom GFA-555 then formed Pass Labs in 1991. Today, in addition to Pass Labs and First Watt, Mr. Pass is quite active in the audio electronics do-it-yourself community, including hosting the amazing Amp Camp events where enthusiasts build their own amp, with guidance of course from Mr. Pass.

The now-discontinued Aleph amplifiers being Pass Labs' first official product was joined soon after by the patented *supersymmetry* topology in the X series of amps using a mostly Class A/B bias arrangement.

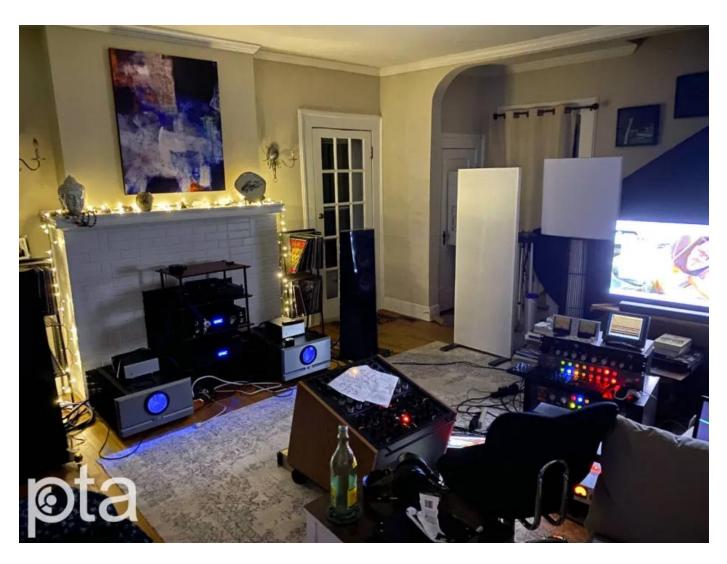
I wasn't as much into home high-end audio in those days but I can tell you the X-250 (currently in its X-260.8 version) was a big hit in mastering studio circles. These amps operate in a Class A bias for the first handful (and most important) of watts.

The XA and XS series is the result of combining topologies of the Aleph amps and X series into a primarily Class A amp. The Pass Labs XA-200.8 in my system is Class A right to the top of rated power output when driving a nominal 8 ohm speaker. When pounding out 400 watts into a 4 ohm speaker, the amp stays in Class A through most of its rated output then seamlessly slides into A/B for that last 20% or so. That means I seriously doubt if I've ever heard the amp slide into A/B bias. Now that I think about it, that's further reason to use one of the big boys like the XA-160.8 or 200.8 even if you don't *think* you need all that power.

According to Nelson, the change from the .5 series to the .8 series is significant. Not only are the power supplies, number of output devices, and heat sinks, greatly increased but a different topology is used. The .8 series use a current-feedback amplifier (CFA) as opposed to a voltage-feedback amplifier (VFA) in the .5 series.

This was brought about because of what was discovered from customer feedback from owners of the First Watt SIT-1. This amp gives users the ability to dial in the harmonic content and location in the phase swing of the remaining very small amount of second harmonic distortion. It turned out people loved this, especially putting the 2nd harmonic distortion in the negative phase of the swing when using the First Watt SIT-1. So the supersymmetry circuit of the .5 series was abandoned (with its 2nd harmonic canceling property) for a controlled amount of asymmetry allowing a tiny amount of 2nd harmonic distortion in the negative phase of the swing to remain.

Aha! Now I know what that infinitesimal special sauce is that my ears like about the sound of the Pass Labs XA-200.8. It also explains why I thought the original series was clean but a bit plain sounding.



Pass Labs XA-200.8 In Use

Of course, I'd seen pictures but those didn't prepare me for the gorgeous visuals and sheer size of these monsters. They look like something you'd find in the engine room of the Death Star but in a slightly friendlier-looking way. When a Class A amp puts out 200 watts into 8 ohms and 400 watts into 4 ohms like the Pass Labs XA-200.8, it's gonna be seriously large.

In the front of its thick, milled aluminum panel is a large, round, classy-looking analog meter that doesn't display power output per se, but rather shows when the amp starts to leave Class A territory. In all my listening, I've never seen the needle move! The front panel of the Pass Labs XA-200.8 also houses a metal push button for turning the amp on from standby mode. Full off is attained via a rocker switch 'round the back of the amp. A small front panel LED indicates the amp is plugged in and turned on. When brought out of standby, the round analog meter glows blue.

Since I routinely plug and unplug inputs to change from my HiFi listening rack to the mastering setup, it's very nice that the front panel switch instantly mutes the amp output (or maybe input?). This ensures there are no noise spikes sent to the speakers when swapping cables – which can occur from slowly discharging power supply capacitors effectively keeping an amp LIVE, even if powered off.

On the rear panel are the aforementioned on/off switch, XLR and RCA inputs, and a parallel pair of what looks like custom-made Pass speaker binding posts. When using the RCA inputs, a supplied copper jumper must be inserted into pin 1 and 3 of the XLR.

I'll confess that I have only used the balanced XLR inputs because whatever preamp I've been using during my time with the Pass Labs XA-200.8 has had balanced outputs. Currently, my hi-fi rack is off to the side so the low impedance balanced output of the VAC Master Preamplifier drives a long run of cable with no loss. My mastering monitor console is balanced output only.

I was a bit surprised that the amps don't run hotter. Yes, they get hot but not burn-your-hand-hot like other gear I've used. Yeah, the electric bill may have gone up a smidgen cause I leave them on for the most part. Neither the heat nor the power consumption was an issue for me. Looks and features are cool to have but I'm really just about the sound. And the sound is GREAT.



Sunset Doesn't Last All Evening

My ideal amp has to have enough power to drive any speaker that comes in for review. It should be of a high enough standard in areas of resolution, noise, low-end control, etc., that will allow me to hear any and all colorations from upstream gear, especially something I'm reviewing. It also has to have a particular type of listenability yet still be accurate enough to act in conjunction with my speakers to be a blank white canvass on which I make mastering decisions.

If I was choosing amplification for a pure listening system, I might consider an amp with a little added color, but lately, my ear loves the clean-sounding stuff. In the future, I may have a dedicated listening/review system and a separate work system but for now, my setup does double duty. That means I need something very accurate – but my ears crave a system that has a little extra something to increase listenability without compromising much in neutrality. Pass Labs XA-200.8 for the win.

I think Mr. Pass has made some very clever and ear-guided decisions about what he wanted to accomplish with the XA series. I've read many times about his feelings regarding the measurement vs. listening debate. Yes, the Pass Labs XA-200.8 has outstanding lab measurements. But so do a lot of other solid-state amps. So what's different and special about the sound of the Pass Labs XA-200.8?

First off, there is a sense of ease alongside a feeling of limitless headroom. Large and In Charge. The sense of ease however is separate from just being a very powerful pair of amplifiers. It's that kingly, upper-class thing I talked about before — which was also in evidence when I used a pair of XA-60.8s.

The Pass Labs XA-200.8 handles low-frequency information in a particularly great way, in my opinion. Playing tunes with lots of bass content reveals not just an impressive amount of size and control but also the ability to reveal all the small textural details in the low end. Low frequencies don't actually have what audiophiles might describe as detail. The detail is contained in the upper frequencies associated with a low-frequency sound. The click of the beater hitting a bass drum. The string noise that comes with the pluck of an upright bass. The upper harmonics that are part of a squarewave, or sawtooth wave, harmonically-rich bass synth sound.



No, what I'm talking about is the subjective damping of how the Pass Labs XA-200.8 handles the low end. The amps seem to start and stop big, low frequencies in a manner that feels very holistically coupled together with the high-frequency detail cues of a low-frequency musical event. There are other amps that seem punchier or tighter or bloomier when amplifying and controlling a loudspeaker, yet the XA-200.8 does it's bass thang in a way that feels more musically related to the signal it's reproducing. Low-frequency coherence that matches what's happening higher up in frequency. Compared to most any other amps I've listened to in my system, the Pass Labs XA-200.8 also seems to reach a hair lower.

I've seen test graphs of the XA frequency response, and like any decent solid-state amp, it's razor flat. So where do the tiny departures from total linearity that I hear come from? Maybe it's in how the Pass Labs XA-200.8 handles a constantly changing load while driving a loudspeaker? That might explain the very slight silky quality to the highest frequencies and the smooth but not gentle or recessed quality to how the Pass amplifies the upper midrange energy of a recording. That's what I hear in my system.



If your speaker of choice already leans to an overly smooth upper midrange, the Pass is not gonna manufacture any extra excitement for ya. Using the extremely linear and revealing Acora SRC-2 which are my day-to-day companions, the Pass Labs XA-200.8 does a perfect job of giving me tons of detail and bass slam without any additional bright spotlight on the 3-5K area. Sounds with a tiny amount of glare or brittle quality to the transient edge are rendered in a slightly softened manner without compromising any sense of speed or detail. This is what I live for. And espresso drinks.

The Pass Labs XA-200.8 defines all the spatial information in a recording without homogenizing anything. The music sounds deep, wide, and layered. The amps gave me a wide-open window into any recording – however simple or complex. It does this without jumping up and down like a child demanding attention. I've found this quietly regal presentation of recorded music draws me in, whether I'm mastering or listening for enjoyment.

No, they don't put that little glowing halo around musical lines and textures that I frequently hear with a great sounding tube amp – like my recent review of the McGary SA-1E. But there is still much liquidity and texture to music reproduced by the Pass amps. The Pass Labs XA-200.8 never sounds dry.

From what I like to hear, the amount of damping and the minuscule amount of 2nd harmonic distortion that is allowed to remain – along with the spectra of higher-order harmonics – does something to create an impression of less dryness and greater flow or liquidity to a recording. This clear flowing river of sound gets all the detail and dimensionality right, as well.

Pass Labs XA-200.8 Conclusion



In the roughly 8 months (far longer if I count the similar-sounding XA-60.8s) these amps have been in my system, I've had the chance to use them with lots of speakers, preamps, DACs, and analog source components. I've never felt like I was missing out on some intangible piece of the audiophile listening puzzle. Are there other great amplifiers that sound different? Yes. Unquestionably better? Not from what I've heard.

I could easily live with the Pass Labs XA-200.8 amps for the long haul. They certainly have been my reference by which all other amps are judged.

Greatness does come at a price. In this case \$42,000 per pair. If you're looking for a pair of power amplifiers to have: 1) all the power you'd ever need for just about any loudspeaker, 2) clear, clean neutrality without any dryness nor an overly etched sounding presence, 3) subterranean low-frequency extension and detail, 4) a holistic flow and silkiness with lots of dynamic subtlety, the Pass Labs XA-200.8

should be at the top of your list.

Highly Recommended.

