the absolute sound

Pass Labs INT-250 Integrated Amplifier

The Outer Limits



When Pass Labs introduced its first-ever integrated amplifier, the INT-150 in 2009, the debut was hailed by many, myself included, as a watershed moment for a sector often derided as "down-market." Reviewing the amp in Issue 184, I noted, "The Pass Labs INT-150 lays to rest the arguments and perceptions of the past about integrated amplifiers. It's a musical force of nature and arguably about as good as it gets in the here and now." In my view, it quickly became one of the handful of integrateds that could compete with high-end separates at all but the most extreme levels—and even then, it made for awfully close competition.

With the success of the INT-150 under its belt, Pass Labs has taken the next logical step by releasing not one but two new integrated offerings, the INT-60 and INT-250. Both are Class AB designs with heavy Class A bias based on Pass Labs' latest Point 8 Series of amplifiers. The INT-250—the subject of this review—weighs in at 105 pounds and outputs 250Wpc into 8 ohms and a stump-pulling 500Wpc into 4 ohms. It was optimized for greater flexibility with grunt-worthy speaker loads of 86dB sensitivity or less. The INT-250 features high-voltage rails and output stages, along with the iconic glowing meter found on Pass Labs' Point 8 amplifiers, direct-access buttons for the four inputs on the faceplate, and a blue LED output-level display. The volume control knob, which is about the size of a hockey puck, is solid aluminum and beautifully weighted—it's an old-school joy to use.



Most IA platforms look more like buffed-out preamps, but the INT-250's tall front panel and industrial-scale heatsinks really mirror those of Pass Labs' massive power amplifiers. Only the aforementioned front-panel input buttons indicate that it has also gobbled up an entire linestage. That said, not a lot of information is observable from the front, so if you're expecting to rename inputs, forget it. The spacious back panel features four line-level inputs, a line-level output, and two pairs of Furutech ratcheting binding posts designed to prevent over-tightening. Included is a hefty, full-featured remote control cast in

aluminum. The elegantly tactile volume control is a digitally controlled ladder with 1dB steps, similar to the one in the XP-30. The input is buffered by a simple stage that adds 4dB of gain to feed both amplifier channels and the pre-out connections.

I asked the man himself, Nelson Pass, to provide a basic compare/contrast between the INT-150 and the INT-250. He replied, "The output stage of the INT-150 is identical to the X150.5. The INT-60 and INT-250 use the Point 8 output-stage topology and power supply, having 20 output devices per channel and the same bias current, but neither are identical to their respective Point 8 amplifiers. The output stage of the INT-250 is similar to the X250.8. The 'on-state' power consumption of these units is minimally about 200 watts and 300 watt respectively, reflecting the high Class A region of the output-stage bias. These amplifiers leave Class A at about 15 and 25 watts peak, respectively. All the output devices are power MOSFETs rated at 150 watts and 20 amps continuous (80 amps peak) for short term aggregates of 3kW and 4.2kW per channel." He also explained that the new INT-250 and INT-60 are not "literally identical" to their standalone counterparts, the X-250.8 and XA-60.8. Nevertheless, "the essential details that deliver the sound of the Point 8 power amplifiers have been tweaked in subjective testing, and the result is very close."

In sonic performance, the INT-250 is a thoroughly modern amplifier with effortless dynamics at the micro and macro levels, an ultra-wide bandwidth, superb low-end control and grip, and effortless highs. The orchestral soundstage is as expansive and dimensional as I've experienced in a solid-state amplifier—or a tube one, for that matter. Both the Vandersteen Treo CT (reviewed in Issue 262) and the ATC SCM20-2SL, and later, the new B&W 805 D3 (review forthcoming) simply opened up, became less of a localized source, and in many instances virtually disappeared from the listening space. In fact, the Pass is so open and holographically transparent that it encourages the listener to consider getting up and taking a walk through the orchestra—and dispensing some high-fives to the conductor along the way. As I listened to a cappella singer Laurel Massé's performance on Feather & Bone swirling into the deepest recesses of the Troy Savings Bank Music Hall, I concluded time and again that the INT-250 just broadens the soundspace so effortlessly, even the ceiling of the venue seems to elevate without restriction.

That's not to say the INT-250 is characterless. Actually it's the amp's lush, Falstaffian midrange that overcame my critic's ear, occasionally freezing my pen midsentence as waves of nostalgia caused me to think back to my earliest experiences with iconic high-end amplifiers such as the ARC D150. (What an amp with the original Magneplanar Tympani 1D!) But its rose-gold signature sound was not due to deviations from accuracy, but rather to the strapping power and fluidity that come from its canny balance of Class A bias and Class AB output. The INT-250 might invite comparisons to tube amps, but only in the sense that, like every Pass amp I've heard, there are strong whiffs of the warmth and harmonic bloom of the actual event. But then there was also the very un-tube-like "management and control" aspect

that produced explosive bass dynamics and supported images on an unyielding foundation in an impeccably delineated stage.



The Pass Labs was a master of serving the extremes in audio reproduction. Timbral contrasts were more vividly distinguished. The baritone sax deployed on Jen Chapin's ReVisions [Chesky] retained the throaty weight and dark resonance that can be constricted and diminished in the company of smaller, less-pedigreed amplifiers. The INT-250 also throws its prodigious weight around in the most unexpected and tender ways. Its transient behavior with percussion instruments was quick-footed and unconstricted, with an almost instinctive ability to capture low-level immediacy, superbly tracking acoustic idiosyncrasies such as an errant footfall, the buzz off a guitar string, a piano's sustain pedal releasing or—even providing a headcount of the voices in a chorus. As I listened to the animated musical exchange between acoustic bass, fiddle, and cello during Appalachian Journey, the Pass Labs amp outlined textural and timbral specifics that exposed more of the entire character of each instrument. Whether reproducing a pianist or cellist, the INT-250 pushes a loudspeaker to the very edges of its performance envelope. I was reminded of the Jack Nicholson line to Helen Hunt in the movie As Good As It Gets: "You make me want to be a better speaker." And this was true of every speaker that the INT-250 drove during my evaluation.

Since I had still had the superb Esoteric K-03X disc player in-house (reviewed in Issue 261), I was primed to return to a favorite recording that I referenced in the INT-150 review. It was the SACD of Anna Netrebko singing Donizetti's "Ardon gli incensi" on the DG SACD Sempre Libera. She's accompanied by a playful glass harmonica that urges her voice upward past a high C, while the delicate layering from the Mahler Chamber Orchestra and chorus defines the limits of the hall behind them. I know I'm quoting myself but, as I said then, for those audiophiles who maintain LP and SACD collections this is where the Pass Labs will show you the money. Its micro-dynamics, fluidity, and spatiality plays to the strengths of these enriched formats and can leave you breathless.

Since the INT-250 was designed for the grunt work of driving low-sensitivity loudspeakers, roughly 86dB and below, my first thought was, "Have I got the loudspeaker for you." My own ATC SCM20-2SL compacts are the passive version of the company's active pro monitor. Rated at 83dB sensitivity—a Marat/Sade-like spec—I figured the ATC's would give the INT-250 a sufficient run for the money. Interestingly the pro version of the ATC is driven in a biamplified configuration allotting 200W to the woofer and 50W to the tweeter—250 watts

total, just like the Pass Labs. I know this loudspeaker like the back of my hand. I own it and it has labored steadily as my reference compact for years. It's an acoustic-suspension thoroughbred, tonally neutral and balanced, capable of superb resolution, pitch control, and transparency, with solid midbass response into the 40–50Hz region (and perceptibly lower depending on the room reinforcement). However, it's also a real trouble-maker. It can sound shockingly dull and dynamically flat when driven by lesser, power-challenged amplification. It thrives on a level of juice that doubles down at 4 ohms, and yes, is also a stickler over the quality of that power.

The INT-250 set a new benchmark for the ATCs. Like a sports car suddenly given another gear, the ATC found a new level of speed and resolution. The airspace between orchestral images was more defined. Textural details were more clarified. Often, low-level information—the harmonic decay of a piano and resonances of cello or of drum skins, for examples—extended a little further.

A true reference integrated such as the 180Wpc MBL C51 made it a contest throughout most of the audio spectrum, but the difference in the Pass Labs' raw power was telling in midrange dynamics and mid/upper-bass grip. In my experience only the Vitus Audio SIA-25 (Issue 218), a pure 25Wpc Class A integrated, has exhibited a more transparent top-end but its relatively low power removes it from the equation with lower-sensitivity loudspeakers.

Finally I should add that the INT-250's soothing and seductive sonics proved an ideal companion for analog LP playback. It just makes you want to spin vinyl, to take a moment to slow life down a bit and appreciate the gatefold art or follow along with the lyrics, or check out who's playing drums, or singing backup on a particular track—elements that are all missing when I plug in a USB stick. With something like Mobile Fidelity's newly remastered, two-disc, 45rpm mono pressing of Jefferson Airplane's Surrealistic Pillow, it's hard to imagine ever sitting down to listen to Grace Slick's fluttering vibrato on "White Rabbit" and "Somebody to Love" on any other format again.

The INT-250 is a force to reckon with. With musicality that is second to none, it operates at the outer limits of what is currently possible in today's integrated amplifier marketplace. It does have rivals breathing down its neck, and it's heavy lifting both physically and financially, but overall I simply don't know of a better integrated amplifier in the world today.