

## Pass Labs INT-25 Integrated Amplifier Review

Proof positive that not all watts are created equal. Especially those designed by Nelson Pass.

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Review By Tom Lyle

Lest one think that this review is simply not only more evidence that I have somehow formed an untoward relationship with Pass Laboratories, I'd build my defense around the fact that every time I reviewed one of their high-end audio components, I was "assigned" the task. Sure, the fact that I use not only the power and preamplifier but also the headphone amplifier I use as references, must not help my case. The next thing I know I'm asked to review their INT-25 integrated amplifier. It's tough work, but someone has to do it. Yes, I'm grateful for my problems.

In addition to the fact that it is designed and manufactured by Pass Laboratories, there are quite a few other reasons why the INT-25 is not an average integrated amplifier. Most notably, the INT-25 amplifier circuit is Class A. For the uninitiated, this is the most inefficient type of amp circuit there is. *Very* simply explained, most linear amplifier circuits are Class A/B, where they run in Class A at very low output, then kick into Class B for the majority of its operation. Class A is the least efficient of all the classes, as most of its energy is converted to heat and the least converted to a musical signal. But *ahh*, the advantages of this seemingly feeble circuit lie in its sound quality, which in my experience it has proven to be the most amazing sounding solid-state circuit that can be had, as it is truly "tube" sounding, with zero of the disadvantages of tubes (other than the heat produced!).

The one and only Nelson Pass also prefers Class A operation and has gone on record saying that he prefers Class A to all other circuits. He says that “it allows the best, most linear performance from very simple circuits, and the best sound comes from simplicity and linearity.” He adds that this simplicity also makes design, manufacture, and reliability a lot easier.

It is easy to hear the advantages of Class A circuit design, but because of the nature of the beast, high wattage Class A amplifiers are less common in many domestic situations. Because of their heat production, Class A amplifiers require heavy-duty hardware compared to most other approaches, but this also comes with the benefit of being able to drive speakers that would normally require higher wattage. Class A amplifiers conduct high current even at idle, and so they end up sending much of that current to the speakers. I’ve heard audiophiles attempt to be funny by stating something like “this amp isn’t rated at xx, Watts, it’s rated at xx Class-A Watts!”.



## Looks

The INT-25 not only has the benefits of sounding like a Pass Labs component, but it also looks like a Pass Labs component. Its thick aluminum cabinet, front panel blue LED readout, and huge heatsinks make it look like it has serious audiophile cred. On their website Pass claims that not only does it have huge heatsinks, but internally it also has massive power supplies, which likely are contributors to its near 50-pound weight.

One of the reasons Class A amplifiers sound so great is that they have very simple linear topologies. Fewer parts in the signal path equal greater transparency. All this, along with Pass Labs’ reputation for very high-quality internal components and reliability, make this integrated amp attractive inside and out.

## Impressed

There I go again, sounding like a Pass Labs representative. I’m not. I am also not easily impressed. Even though this isn’t an upper-echelon, esoteric, mega-buck component, there are lots of things to like about this integrated amplifier. The advantages of a lower-Wattage amplifier are that it is “simpler” — it has fewer gain stages, This means lower voltages, and gives it the ability to run those gain stages at higher bias currents.

Pass Labs strategy includes replacing banks of smaller transistors with a single pair of FET devices that have a 700 Watt / 40 Ampere rating. With no “current-hogging” issues and a new constant-current bias circuit to compensate for temperature drift, they connect directly to the

loudspeaker without ballast resistors for the lowest possible distortion and highest damping factor. No degeneration also increases the efficiency and Class A operating current, allowing greater Class A operation into low impedance and reactive loads. No degeneration also allows for a more pure “square law” operation, which as with tubes, improves dynamics and will also improve distortion cancellation.



## Heavy

The Pass Laboratories INT-25 might “only” have 25 WPC under the hood, but it’s no lightweight. Its 6” high and 17” deep by 17” wide heavy metal cabinet weighs about 50 pounds! On its front panel, it has a very readable numerical blue LED volume readout, and includes a silky-smooth running, large volume control knob. A row of push-buttons below the LED is for leaving standby and powering the unit, as well as its input selection.

I was lucky enough to be able to use the INT-25 with many different pairs of speakers, and to my surprise, or perhaps it shouldn’t have been a surprise, that the INT-25 was not only able to drive each of them but sounded great on all of them.

## Reviewing

Luckily, during the review period, I was also reviewing a pair of Sonus faber Olympica Nova V speakers. Some might think that these speakers are too large to be driven by a 25 Watts per channel integrated amplifier. Not so. The Pass Labs INT-25 was able to drive this three-way,

five-driver, nearly four-foot tall, 100-pound brutes to just about any volume I desired. Not only were they able to drive these speakers, but they also did this easily, without any distortion mixed with the music that came forth from their drivers.

Even though in their literature Sonus faber recommends that the amplifier rating should be at a minimum of 60 WPC, I suppose that this doesn't apply to the number of watts that are coming from a Class A Pass Laboratories amplifier. This comes back to the statement made to me by Nelson Pass, that Class A amplifiers have (because they require) bigger hardware compared to the other "low powered" amplifiers, and that they are already conducting such high current, even at idle, and this higher amount of current makes its wattage rating less important.



All this wouldn't matter much if it couldn't be proven in my listening room, but not only could the INT-25 drive the Sonus faber Olympica Nova V speakers, but the music coming out of these speakers sounded marvelous. I used the INT-25 when I reviewed the Sonus faber speakers within last month's Enjoy the Music issue (November 2020), and believe me, I also used the INT-25/Sonus faber combination when listening to music in my "free time" (there is no reason I need to explain why "free time" is in quotes, do I?).

Other speakers I used during the INT-25's review period included a pair of inexpensive, but rather large pair of "vintage" Magnepan SMGa flat panel speakers, which usually only sounded good with higher-powered amplifiers, and also a pair of my reference two-way floor-standing EgglestonWorks Isabel Signature, which also sounded marvelously connected to the INT-25. These speakers, along with the Magnepan, needed a bit of bass reinforcement with the SVS SB-2000 subwoofer I had on hand, an inexpensive but surprisingly good sub, especially when all that's needed is a bit of augmentation in the deepest bass.

The EgglestonWorks are very transparent full-range speakers, models that I've recommended to many audiophiles who have a small listening room but prefer floor standing speakers over a stand-mounted pair. They were able to demonstrate the magic that this Pass Labs integrated amplifier was able to inject into the music. It did this not by exaggeration of any of the qualities that were in the recording, but instead, by bringing out the best in the recording, qualities that one might not even know were present.

The sonic magic that the Pass Labs INT-25 was able to deliver was made very evident as I was playing just about every "Krautrock" fan's favorite album, *Tago Mago*, by the early 1970s German band Can. I played two copies of this album that I had on hand, the first an SACD that

was released in the early '00s, played on an OPPO BDP-83 Special Edition universal disc player, and a Japanese pressing of a double LP played on a Pro-Ject X2, using an Allnic Rose phono cartridge (review forthcoming), connected to a Pass Labs XP-15 phono preamplifier. The Pass Labs INT-25 was able to separate the instruments on this sometimes crowded, direct to a two-track recording, not only by isolating each instrument and voice within a huge soundstage, but separating each instrument and voice with dynamic distance, that is, unaffectedly separating them from each other, despite their appearance in the same area of the soundstage, and at the same time emphasizing very slight differences in their apparent volumes. The INT-25's level of dynamic distance is a type of trait that I normally hear with the best amplifiers and equipment powered by vacuum tubes.

On the leadoff "Paperhouse", Holgar Czukay lays down his Fender bass, energetically plucking its strings with his fingers, each string slapping against the instrument's fingerboard, the bass guitar's low-end thud mixing with the hypnotic motoric drumming of Jaki Liebezeit. This "you are there" recording still isn't what one would call a typical "audiophile" recording, yet its two-track origins have been praised by many an audiophile. The many notable sonic traits of this particular Can album are easily passed on by the Pass Labs INT-25 to any of the speakers that I had in my system during the review period.

Regardless of which speakers I had in the system when I played "Tago Mago" I was drawn into their world of rhythmic complexities mixed with psychedelic overtones. The INT-25 was able to let me "see" deeply into the recording, creating space between the sounds that enabled me to hear sounds around me as I passed deeper into the sonic labyrinth that the band created. On "Paperhouse", Michael Karoli's single-string fuzz-guitar floated atop the proceedings, as vocalist Damo Suzuki's Japanese accented English turned his lyrics into rhythmic sounds more than words, as it was intended, adding to the pulse that also highlighted the percussive aspect of leader Irmin Schmidt's electronic keyboard.

## Continues

I often think that David Bowie's estate continues to release his albums because they are sure that I'll buy a copy in at least two different formats to add to the plethora of his releases that I have in my collection. On Record Store Day 2020 they released yet another live album, this one from the second half of his 1974 N. American tour. The album's title, *I'm Only Dancing (The Soul Tour 74)* is a reflection of how Bowie at least partially departed from the theatrical extravaganza of its first half of the tour, which was largely centered around the recently released *Diamond Dogs* album. They did away with much of the flamboyant stage set and also revised some of the setlist to include tracks from the soon to be released *Young Americans* album. There were some changes made to the band personnel, including the addition of more backup singers, which included the inimitable Luther Vandross.

I suppose I'm choosing yet another non-audiophile-approved recording in which to demonstrate the Pass Labs INT-25's prowess in being able to take an "ordinary" recording and make it more than listenable due to the way it takes the music and expands its vista to the listener. Not only is it able to separate each instrument, sound, and voice — but along with this, make each of these sounds more "visible" to the listener.

The signal of Carlos Alomar's guitar travels through the INT-25, and its circuit seems to be able to think, "Oh, that's Carlos Alomar's guitar!", and so it makes more of the nuances of his playing style more evident when the sound of his guitar comes out of the speakers into my listening room.

I hope this obtuse way of describing the sound of the Pass Labs INT-25 doesn't seem *too* odd. I also hope one understands that a piece of audio gear such as the INT-25 deserves and take advantage of the best and most appropriate speakers one can afford, *and* the best and most appropriate front-ends one can afford (at least eventually, as often assembling a system is a process).

Which gets me to the next important thing about the Pass INT-25: it is a relative bargain. I am aware that not everyone has \$7,250 lying around. But, I'm convinced that there is no way one is going to be able to put together a preamplifier/power amplifier combination, let alone acquire an integrated amp, that will sound as good as this integrated amplifier anywhere near its asking price. One that has more wattage? Sure. Has more features? Probably. Sounds as good? No way.

The Pass Labs INT-25 isn't the first audio component I've heard over the years that seems to have some sort of magical circuit where it "knows" what type of instrument, voice, or sound is passing through it. But it is definitely one of the most affordable integrated amplifier or amplifier that can perform this feat at this level.



## Heavy-Duty

The rear panel of the Pass Laboratories INT-25 has heavy-duty speaker posts, three pairs of RCA inputs, and an IEC power input for the cable of your choice. In my opinion, the spartan rear panel of this integrated amplifier is the only negative that I discovered during the review period. For example, other than the Sonus faber Olympica Nova V, the other speakers that I used, I "needed" to use my remarkably good for its very low price resident SVS SB-2000 subwoofer, one that uses only line-level RCA inputs for a signal. Without a subwoofer output or a preamp output on its rear panel, I was forced to use a speaker-to-low-level converter to connect the sub to one of the INT-25's speaker outputs, a method I'm not too thrilled with using, for many reasons.

But this integrated amp was reviewed in a high-end audio magazine by someone who considers themselves a serious audiophile, so that's how I reviewed it. Its sound is first-rate, but the INT-25 is lacking in intangibles. What's missing? Pretty much everything. There are no XLR ins or outs, no subwoofer output(s), no tape loop, etc., etc. Not only would the INT-25 cost more if more features were added, but after considering this for only a short time, I remembered what

Nelson Pass said — that the best sound comes from simplicity and linearity. And so, the Pass Laboratories INT-25 lack of extra features, not to mention its Class A circuit, is an indication that its simple signal path from input to output is very likely responsible for a huge part of why it sounds so darn good.

## Unmatched

After living with the Class A Pass Labs INT-25 integrated amplifier for a few months, it was easy to conclude that its level of transparency is astounding, which led to other characteristics that enabled it to connect me with my favorite music like no other integrated amp I've ever heard before. I cannot stress this fact strongly enough. Its relatively low power output will be an obstacle for only a few, as it was able to drive many different types of speakers with ease. It did this while it was able to make the music the focus, not the equipment that was reproducing it. Even though the Pass Laboratories INT-25 integrated amplifier might be missing just about all the mod cons, it is a component that I would think that many audiophiles would not only love to use in a second system, as I did, but I could easily imagine it being used as one's resident amplifier as the centerpiece of one's high-end audio system. It isn't perfect, as it is missing many of the conveniences that many modern listeners expect these days. But these things are easy to overlook and work around. This is because the Pass Laboratories INT-25 is a fantastic sounding component that should be considered by anyone who loves music.

|                                  |       |
|----------------------------------|-------|
| Tonality                         | ★★★★★ |
| Sub-bass (10Hz – 60Hz)           | ★★★★☆ |
| Mid-bass (80Hz – 200Hz)          | ★★★★☆ |
| Midrange (200Hz – 3,000Hz)       | ★★★★☆ |
| High Frequencies (3,000Hz On Up) | ★★★★☆ |
| Attack                           | ★★★★☆ |
| Decay                            | ★★★★★ |
| Inner Resolution                 | ★★★★★ |
| Soundscape Width Front           | ★★★★★ |
| Soundscape Width Rear            | ★★★★★ |
| Soundscape Depth                 | ★★★★★ |
| Soundscape Extension Into Room   | ★★★★★ |
| Imaging                          | ★★★★★ |
| Fit And Finish                   | ★★★★★ |
| Self Noise                       | ★★★★☆ |
| Value For The Money              | ★★★★☆ |

## Specifications

- Type: Solid-state stereo amplifier
- Power Output: 25 Watts per channel Class A
- Gain: 29 / 35 dB
- Volume Control: 63dB in 1dB steps
- Remote Control: Yes
- Inputs: Three
- Outputs: Five-way gold speaker cable binding posts
- Dimensions: 17" x 17.375" x 6" (WxHxD)
- Weight: 49 lbs.
- Price: \$7250

### Company Information

Pass Laboratories  
13395 Airport Road  
Suite G  
Auburn, CA 95602

Voice: (530) 878-5350

Fax: (530) 878-5358

Email: [info@passlabs.com](mailto:info@passlabs.com)

Website: [www.PassLabs.com](http://www.PassLabs.com)

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