Equipment Reviews

Luxman L-507Z Integrated Amplifier



Written by Hans Wetzel Created: 01 August 2023

Note: for the full suite of measurements from the SoundStage! Audio-Electronics Lab, <u>click here</u> (<u>https://www.soundstagenetwork.com/index.php?option=com_content&view=article&id=2951:luxman-l-507z-integrated-amplifier-measurements&catid=97:amplifier-measurements&Itemid=154</u>).

I don't usually find myself drawn to old-school gear that's heavy on nostalgia. Maybe it's because, as an older millennial, I didn't cut my audio teeth on components with VU meters, knobs galore, and healthy dollops of brushed-silver hardware. But back in 2015, <u>I reviewed</u> <u>Luxman's L-550AX integrated amplifier (https://www.soundstagehifi.com/index.php/equipment-reviews/848-luxman-l-550ax-integrated-amplifier)</u> (\$4990 when available; all prices in USD) and fell for it hard. In many ways, that amplifier was the antithesis of the type of gear I ordinarily liked. Vintage looks, yellow-tinted VU meters, flyweight power (a mere 20Wpc into 8 ohms), and space-heater levels of thermal output from its pure class-A topology—that's not a recipe I'd normally warm to on paper. But listening is believing, and I was so enchanted with the L-550AX's sound, I declared it "outstanding" and "the best-sounding integrated amplifier for under \$5000." So, when I was offered the opportunity to review Luxman's newest integrated amplifier, the L-507Z (\$8995), I jumped at it.



As a refresher, Luxman is a Japanese brand that put down roots back in 1925, long before most hi-fi brands came into existence. They started in the then-nascent radio space before transitioning to the design and manufacture of high-end vacuum-tube-based audio gear. These days, the company manufactures a variety of solid-state and tubed amplifiers, preamplifiers, and integrated amplifiers, as well as DACs, digital players, phono stages, a turntable, and even speaker cables. But since the 1960s, integrated amplifiers have been Luxman's primary focus.

Description

The L-507Z is the first model in Luxman's new Z series of integrated amplifiers. Luxman was coy when I asked if the next offerings in the lineup would slot in above or below the L-507Z, but I was told additional models would be announced later in 2023. This is the first model to feature the new Luxman Integrated Feedback Engine System (LIFES) amplifier topology, replacing Luxman's longstanding Only Distortion Negative Feedback (ODNF) topology, which was at the heart of the L-550AX I reviewed almost eight years ago.



Both technologies operate on the same principle: identifying and eliminating unwanted distortion by providing feedback only when distortion is detected in the amplifier circuit. Compared to the fourth and final generation of ODNF, Luxman notes that their LIFES circuit is "twice as sensitive at identifying unwanted distortions." Luxman accomplished this in part by reducing the number of paralleled elements in the circuit's design. The LIFES output stage uses the same "3-stage Darlington triple-paralleled push-pull configuration" that Luxman has used to great effect for the last 15 years. As with the ODNF system before it, the LIFES circuit operates in pure class-A mode for the first 1.3W RMS before transitioning to class-AB operation. The L-507Z uses eight 10,000µF capacitors in its power supply. And the newest version of Luxman's LECUA analog volume attenuator, the electronically controlled, 88-step LECUA1000, is also used in the L-507Z.

My first impression after unboxing the L-507Z was overwhelmingly positive. Measuring 17.4"W × 7"H × 17.9"D and weighing 56 pounds, the L-507Z is a full-size component that feels very sturdy in your hands. The fit and finish are excellent for this price point. Starting up front, the faceplate is crafted from a piece of solid, brushed aluminum that looks great from across the room and even better up close. All controls have fantastic hand feel, with good resistance and tactility on both the input and volume dials; and there's a satisfying relay click to the Operation button, which switches the unit off and on. The aluminum knobs for speaker selection, balance, and bass and treble adjustment also feel high quality. Then there are the VU meters, which have a mechanical, watch-like intricacy. Covered with a thick piece of acrylic and illuminated with soft white LEDs, they're easily discernible, and there's nothing quite like watching these meters dance when you're playing highly dynamic material. Between the two meters is a seven-segment red LED display. Though I'm not the biggest fan of the color choice, the display does provide a digital readout of the unit's volume that can be easily seen from the listening position. And it can be set via the remote control to automatically turn off, which works for me. Overall, this is a fabulous-looking piece of kit.



There's quite a bit to unpack functionality-wise. The L-507Z allows users to connect two sets of loudspeakers that can play either together or independently of one another, which may be handy for some users. Tone controls for ±8dB bass and treble adjustment at 100Hz and 10kHz, respectively, are also handy inclusions, as is the balance control. There's also a Loudness function that tailors the Luxman's frequency response to conform with Fletcher-Munson curves for listening at low volumes and through headphones. Speaking of headphones, the L-507Z has 6.3mm single-ended and 4.4mm Pentaconn balanced outputs, both of them pulled down from the amplifier section and optimized for 16- and 32-ohm loads. Finally, the L-507Z includes a home-theater bypass function, as well as a subsonic filter to roll off bass output in apartment or condo settings. The included aluminum remote is kind of old school, with small plastic buttons and controls for just about everything the amp can do, allowing you to control just about anything from the listening position, including crucially—the Operation button. I wish this feature were standard on every integrated amplifier, including my reference unit, but sadly it isn't. Thanks, Luxman.

Around back are 12V trigger and control inputs and outputs, two pairs of balanced (XLR) inputs with adjustable phase control, four pairs of unbalanced (RCA) line-level inputs, Main In and Pre Out jacks (both RCA), and an MM/MC phono input. I'm strictly a digital guy and don't own a turntable, so I was unable to assess the L-507Z's phono stage. As mentioned above, there are two sets of binding posts that accept spade- or banana-terminated cables, with each set indicating compatibility with 4- to 16-ohm loads, and language noting that driving both at the same time should be limited to 8- to 16-ohm loads.

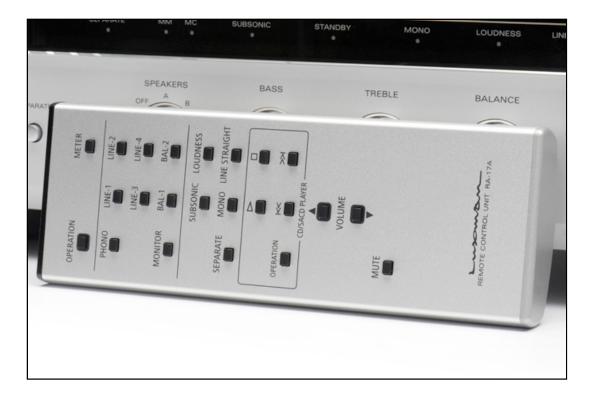


The L-507Z is specified to output 110Wpc into 8 ohms, which almost doubles to 210Wpc into a 4-ohm load. THD is noted as 0.007% when measuring an 8-ohm load at 1kHz, rising to 0.03% when measuring the same 8-ohm load from 20Hz to 20kHz. The Luxman has a signal-to-noise ratio (IHF-A) of greater than 105dB from its line-level inputs, and a stated damping factor of 300. Finally, the frequency response is listed as 20Hz–100kHz, -3dB.

And like every Luxman product, the L-507Z is manufactured in Japan at the company's Shinyokohama factory. It's warranted for three years.

Setup and listening

The Luxman took the place of <u>my reference Hegel Music Systems H590 integrated amplifier-DAC (/index.php/reference-systems/hans-wetzel/1147-hans-wetzel-system-integrated-amplifier-dac-hegel-music-systems-h590)</u> in my system. I partnered the DAC-less Luxman with Hegel's HD30 digital-to-analog converter (https://www.soundstagehifi.com/index.php/equipment-reviews/923-hegel-music-systems-hd30-digital-to-analog-converter), which in turn was hooked up to my Intel NUC Roon music server via USB. All cabling was from Siltech's Classic Legend line. The Luxman saw use with three different pairs of loudspeakers during its time with me: KEF's Reference 3 (https://www.soundstagehifi.com/index.php/equipment-reviews/1054-kef-reference-3-loudspeakers) (my personal reference (/index.php/reference-systems/hans-wetzel/1146-hans-wetzel-system-loudspeakers-kef-reference-3)), Kharma's Elegance dB7-S (/index.php/equipment-menu/1176-kharma-elegance-db7-s-loudspeaker), and T+A's Solitaire S 530 (/index.php/equipment-menu/1182-t-a-elektroakustik-solitaire-s-530-loudspeaker). My listening impressions below are aggregated across the Luxman's use with all three models.



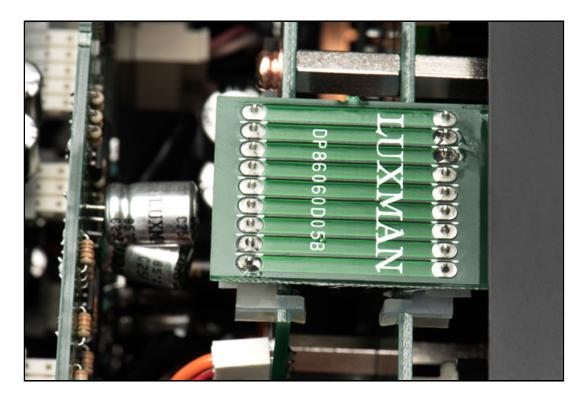
One final note. While I loved just about everything the Luxman did, I found that the volume control—whether adjusted via the L-507Z's dial or using its remote control—was occasionally finicky. It scaled quickly and was sometimes difficult to dial in, with a remote button press sometimes resulting in a jump from, say, 48 to 50, and from 50 back to 48; it sometimes took several attempts to land on an indicated 49. Hardly a deal breaker, but annoying for sure.

What I loved about the older L-550AX was that it had this magic, golden midrange marked by a wonderful three-dimensionality, and I was expecting to hear more of the same when I started slinging music at the L-507Z. But that wasn't entirely the case. In fact, the newer Luxman sounded more like my Hegel H590: muscular, resolving, and effortless. On "Mess You Made," the 2017 single from Canadian singer-songwriter Sam Lynch (16-bit/44.1kHz FLAC, Sam Lynch / Tidal HiFi), Lynch's strummed electric guitar opening is etched with real vividness and contrast against the otherwise black background, punctuated by a halo of reverb, and I was delighted by how clear and concise she sounded. Her opening lyrics were enunciated with delicious precision and clarity, her sonic outline laser-drawn between my big KEF towers, with a highly convincing stereo image, and as much microdetail as I've ever heard in my system. Outstanding stuff.



I was so enchanted with the Luxman's handling of acoustic fare that I quickly pivoted to Calum Scott's single release of "Dancing on My Own (Acoustic)" (16/44.1 FLAC, Capitol Records / Tidal HiFi), a reimagining of Swedish icon Robyn's 2010 electropop hit. Gone is the catchy, high-tempo electronic rhythm that made the original so popular; this is replaced with something far more deliberate and nuanced. Scott's delivery is more emotive, with greater power and range than the original, landing with a devastating lightness that is perfect fodder for something like the Luxman. The Luxman's sound was so lithe, and yet so exacting, that I repeatedly found myself listening, not evaluating. I so enjoyed the end result that I played it no fewer than four times in succession, with goosebumps very much on display. There was no added tonal color or editorializing, no hash or edge, just wicked transparency to the source.

Bruce Brubaker's "Metamorphosis 2," from his album *Glass Piano* (16/44.1 FLAC, InFiné / Tidal HiFi), highlighted all that is special about the L-507Z. The solo piano piece is spun as if from silk by the Juilliard graduate, such is its subtlety, and in the first 90 seconds I drank in his simple chords and keystrokes as they were recreated in massive scale in my listening room, with the soundstage extending quite deeply beyond my front wall. From the capturing of Brubaker's footwork on the pedals, to the occasional intake of breath from Brubaker himself, these details—imperfections, even—are what make recordings special to me, and I appreciated that the L-507Z was able to unearth all of the darkened corners of this track without embellishment. Of the L-507Z's many talents, what stood out most was its ability to paint a soundstage that was not only deep but layered, something I discovered the class-A L-550AX did so well when I reviewed it years ago. The piano felt palpable as Brubaker's hands started making quick runs up and down the keys around the 2:10 mark, each stroke cleanly defined.



For something more dynamic, I played Nirvana's "Smells Like Teen Spirit," from the remastered version of *Nevermind* (16/44.1 FLAC, Geffen / Tidal HiFi). The grunge classic isn't the strongest recording, but I loved that I could crank the track to a very high volume and not flummox the Japanese integrated amp. Kurt Cobain's vocal scaled perfectly, his slurred delivery sounding at once smooth and exceedingly detailed, quick, yet full bodied. And Dave Grohl's big kick-drum thwacks in the opening bars proved punchy and well controlled. This kind of brash, splashy track clearly shows that the Luxman isn't a shy amp. It does exhibit a forward presentation that seemed to emphasize the leading edges of each pluck of Cobain's electric guitar. But I welcomed this quality, as the Luxman was otherwise so composed that I never once felt its revealing nature proved too much of a good thing. It made the Nirvana classic a gripping listen, especially with my KEF Reference 3 loudspeakers, which are a model of linearity. Playing this track through Kharma's Elegance dB7-Ses, with their more prominent treble, did alter the track's tonality to a degree, but I also heard even greater levels of insight into the recording with the Dutch towers in play. The T+A Solitaire S 530, with its lengthy line-source tweeter and midrange line array, proved an even better pairing with the Luxman on this track, with to-die-for stereo imaging.

Dr. Dre's "What's The Difference," from 2001 (16/44.1 FLAC, Aftermath / Tidal HiFi), is a different kettle of fish, with its ample bass line and bleating horns. I feared that the Luxman might not have the chops to fill out the track's bottom end and might prove too forward. Silly me. The track sounded phenomenal. Emerging from the left channel, the trombone had plenty of body and warmth. The bass synth was supple

and extended, and Dre's vocal exhibited healthy bloom through the center of the soundstage. Boy, was it gratifying to drive my KEF Reference 3s—whose sensitivity is 87.5dB (2.83V/m)—to insanely high levels, the L-507Z's VU meters bouncing wildly along the way. It never faltered. Eminem's entry halfway through the track confirmed what I suspected: the Luxman's tonality was, to my ears, perfect. The Detroit native's nasal style was flawless, and his various stereophonic sound effects, panning from left to right across the soundstage—including mimicking a car driving by and a machine gun—demonstrated the Luxman's lateral soundstaging talents, the sound effects extending a touch past the outer baffle of each Kharma Elegance dB7-S.



Finishing off, I played a soundtrack that I hadn't listened to in a while, *Tron: Legacy* (16/44.1 FLAC, Walt Disney / Tidal HiFi), as composed and performed (in part) by electronic duo Daft Punk. The entire disc is a worthy listen, as Daft Punk fused their futurist electronica with an 85-piece orchestra recorded in AIR Lyndhurst Studios, but "Solar Sailor" is the standout track as a bass torture test. The cut rides on an undercurrent of a deep electronic bass line that ebbs and flows throughout its short 2:42 runtime, and the Luxman exhibited total control over the big T+A S 530s, with their opposing side-mounted 8.7″ woofers. Even pushed beyond the highest listening levels that I'd ever be likely to play in my big listening space, the L-507Z never compressed or clipped. And given that the S 530 is only moderately sensitive—86dB (1W/m)—and presents a nominal 4-ohm load, that's all the more impressive.

Comparison

My Hegel H590 (\$12,000) is a different animal than Luxman's L-507Z. Whereas the Japanese amp's styling and build harks back to decades past, the Hegel reflects its Scandinavian roots through utilitarian minimalism. That's the charitable take on my Norwegian amp. The hot take is that Hegel's design language hasn't changed in over a decade and looks cheap when placed side-by-side with the upscale-looking Luxman—despite costing 33% more at the time of this review. But while you get less in beauty and build, you get far more in power and functionality, as the Hegel's amplifier puts out a virile 301Wpc into 8 ohms, a figure that nearly doubles into a 4-ohm load, and there's enough current to power a city block. You also get a full-featured streaming DAC that's Roon Ready and supports Apple AirPlay 2 and Spotify Connect. Pluses and minuses, then.

Sonically, there are few differences between the Hegel and the Luxman. Each of these amplifiers put out more than enough power to drive all of the high-priced speakers I had in for review to eardrum-splitting levels, and each possessed an inherently engaging character that made me want to listen to my catalog of music for hours on end. But with the Hegel reinserted into my system and the tracks starting to tick through, the H590's slightly more relaxed character began to shine through. To be clear, the margins were subtle—the H590 is *not* a relaxed-sounding amplifier with tube-like sensibilities. The Hegel was merely more relaxed sounding compared to the Luxman.



The stereo image sounded a touch recessed and less immediate on Calum Scott's "Dancing on My Own." The Hegel delivered what was likely the more neutral and natural presentation, but it also lacked that brilliance and sheen I adored in the Luxman's sound. There was a certain magic to the L-507Z's take on Scott's vocal that the Hegel, despite its many talents, couldn't recreate, and that sonic magnetism was similar to what I experienced when I reviewed the original L-550AX back in the day. There's a visceral quality to the Luxman sound that I haven't heard from any other electronics manufacturer over the years.

Dr. Dre's "What's The Difference" yielded similar results, with the horns sounding smoother and less brassy through the H590 than they did through the L-507Z. And the doctor himself—no doubt an alumnus of the graduate school of Hard Knocks—was a bit muted by comparison, with the entire track sounding less contrasty and Technicolor with the Hegel directing the proceedings. The one emphatic win on the H590's scorecard was its bass control, with Dre's heavy bass line proving tauter in my big room and pressurizing it to a more satisfying degree. In terms of detail retrieval, I found both integrated amps were highly, highly resolving on "Mess You Made," the primary difference in sound being the Luxman's elevated jump factor.

Final thoughts

Luxman's L-507Z is a fabulous integrated amplifier. Its sound is beyond reproach, being at once linear and dynamic, highly engaging yet non-fatiguing. The Luxman is quiet, more muscular than its modest specs might otherwise indicate. Every track that I fed through the company's new LIFES amplifier circuit thrilled me. Ally that with high-quality craftsmanship and superb levels of fit and finish for its price point, and it should come as no surprise that the L-507Z has quickly become one of my favorite amps of the last few years. Throw the soft glow of mechanical VU meters in the mix, and it's clear to me that the Luxman integrated isn't just great, it's *special*. And for that reason, Luxman's L-507Z is what I'd buy if I were in the market for a high-four-figure integrated amplifier.

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Note: for the full suite of measurements from the SoundStage! Audio-Electronics Lab, <u>click here</u> <u>(https://www.soundstagenetwork.com/index.php?option=com_content&view=article&id=2951:luxman-l-507z-integrated-amplifier-</u> measurements&catid=97:amplifier-measurements&Itemid=154<u>)</u>.

Associated Equipment

- Speakers: KEF LS50 and Reference 3; Kharma dB7-S; T+A Elektroakustik Solitaire S 530.
- Integrated amplifier: Hegel Music Systems H590.

- Digital-to-analog converter: Hegel Music Systems HD30.
- Sources: Intel NUC computer running Roon, Tidal HiFi.
- Speaker cables: DH Labs Q-10 Signature; Siltech Classic Legend 680L.
- Analog interconnect cables: Dynamique Audio Shadow (RCA), Siltech Classic Legend 680i (XLR).
- Power Cords: Siltech Classic Legend 680P.
- Digital interconnect: Siltech Classic Legend 380.

Luxman L-507Z Integrated Amplifier Price: \$8995. Warranty: Three years, parts and labor.

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