

# Luxman L-590AXII

Luxman does the ‘Time Warp’ with a killer integrated that screams ‘1976’ but knows it’s 2016 – welcome the feature-laden powerhouse with the retro name, the L-590AXII  
 Review: **Ken Kessler** Lab: **Paul Miller**

I have loved Luxman products for decades, yet always wondered why they aren’t more widely appreciated here. Distribution issues... price... a crowded market? Maybe it will change for Luxman now that it’s part of IAG, which also owns Quad. This beast of an integrated amplifier, the L-590AXII, certainly merits your attention.

OK, at £6995 we’re talking about a tiny market for a highly-priced integrated which – for that kind of money – also has to compete with separate pre/power combinations. But is that really an issue? Surely customers shopping at this level already know whether or not they want an integrated or separates, so it really only has to compete with *other* integrations.

## WATTS UP HERE?

Luxman, however, lets you hedge your bets against a change of mind – eg, you suddenly find the space to house a pre/power combination – so you can use this as a preamp *or* power amp by activating a button labelled ‘separates’, next to the one labelled ‘direct’, to bypass the balance and tone control circuitry.

We’ll get to the performance in a minute, but I’ll say this first: this unit drove Wilson Alexias [*HFN* Mar ’13] to decent levels, and sounded like it was made for the KEF LS50s [*HFN* Jul ’12] – the latter famously hungry at 85dB/1W and worthy of serious grunt. But isn’t this supposed to be a 30-watter?

Editor PM was as amused as I was at his measurements versus Luxman’s stated rating: it delivers the wattage to label it legitimately a 90W/ch amp. PM explains in his Lab Report that the 30W/ch rating may apply only to its billing as a Class A amp [see p47]. Regardless, this amp is no 30-watter in its real-world behaviour. And don’t we all love the sonic purity of Class A operation [see KH’s boxout, facing page]?

**RIGHT:** Massive 615VA frame transformer feeds mono power supplies and L/R audio stages, the latter comprising a three-stage parallel-output power amp mounted on huge, finned heatsinks

But sheer power, Class A or otherwise, will not be the reason you might fall in love with the L-590AXII, any more than you will be seduced solely by its silky, powerful, rich and controlled sound. No, you will want this for the same reason that people buy retro-inspired cars: it is bursting with the features and virtues that we enjoyed in hi-fi until ultra-minimalist purists declared anything beyond a volume control and source selector as anathema.

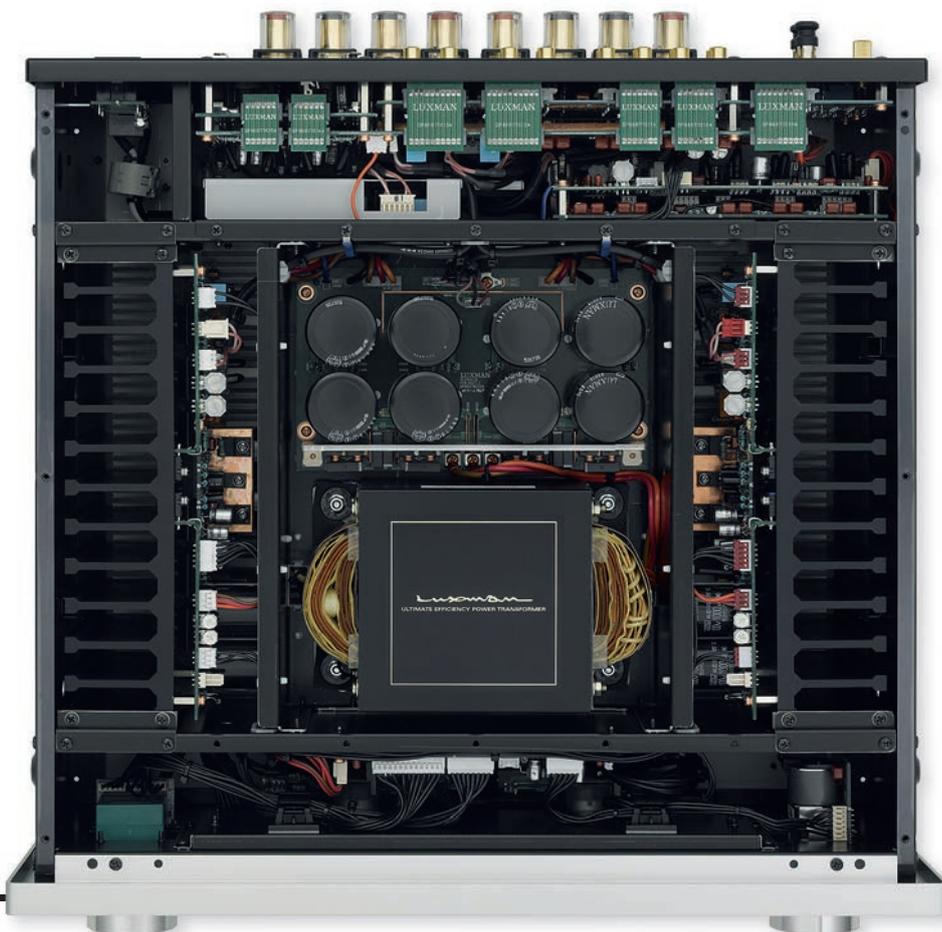
Just look at this sonovagun. It’s massive, at 440x193x463mm, and weighs more than I care to lift at 28.4kg out of the box. Hell, the empty box weighs more than some integrated amps! It features everything that you need bar a DAC to serve as the heart of a system between sources and speakers, with a

comprehensive remote and all of those conveniences some of us miss, like a mono selector, bass and treble controls, MM/MC phono stage, subsonic filter and loudness control – all of which have their uses, even if outside of ‘serious’ listening sessions.

## HIGH-END SOLUTIONS

And there’s a headphone amplifier too – which drove Focals and Beyers and vintage Sennheisers with ease – as well as terminals for two sets of speakers. This, of course, means an A or B or A+B selector, as well as a speakers-off position for headphone usage, as the headphone socket is active regardless of whether your speakers are in use or not.

At the heart of the amp is the company’s proprietary ‘ODNF 4.0’ (Only





Distortion Negative Feedback) drive circuit, with what it describes as a 'three-parallel push-pull structure with three-stage Darlington'. Meanwhile the 'Ultimate Efficiency Power Transformer' in its power supply, an EI type rated at 615VA, accounts for much of the weight. The unit may look like it was designed when Maggie was in No 10, but inside, it utilises every high-end solution to emerge since: low-impedance transmission design, carefully selected custom components and short signal paths.

It's the innards that reveal the differences between this and the original L-590AX. The 'II contains eight PSU capacitors, four per channel and double that of its predecessor, and shares topology with the dearer M-700u stereo power amp [*HFN* Sep '15], so it's my hope the L-590AXII should have an easier time with difficult speaker loads. As for the preamp stage, it is based on the technology from the C-900u

**'This new Lux amplifier is no 30-watter in its real-world behaviour'**

preamplifier [also *HFN* Sep '15], and that means the delightful-to-use and super-precise LECUA 1000 volume control. You'll love playing with the remote just to access this, and also to hear relay clicks with each press of a button.

Then there are the VU meters, a feature that makes us swoon when we see Nagra and McIntoshes and products from others who know that their allure vastly out-sexes

LEDs. This unit sports one for each channel, to provide a real-time indication of signal level. It may mean absolutely nothing in lab terms, but it looks great – and what's wrong with that?

At the back, every socket has its own protective cover. Phono sockets are fitted for four single-ended line inputs and phono (plus earthing post) as well as two balanced XLR inputs. Other socketry accounts for record-out, monitor-in and pre-out, and two remote output terminals

**ABOVE:** Nothing about the L-590AXII says 2016 as once-lost features are revived: headphone socket, phono stage, VU meters, A+B speakers, Rec out, tone controls – welcome back!

for integration with AV systems, while its two pairs of speaker binding posts accept spades, bare wire or banana plugs.

### **UNDENIABLE AUTHENTICITY**

You'll know this is Class A in part after about ten minutes, when it starts to warm up – and you'll hear it, too. There's a slight delay while the unit stabilises from switch-on, but don't form any judgements until this has been cooking for 20-30 minutes. I dipped straight into vinyl, using the rather fine internal stage with the Clearaudio Goldfinger [*HFN* Jan '15] on an SME 30/12 [*HFN* Mar '11]. And the first LP told me more about the Luxman in one track than I could have imagined.

Having just used Eleanor McEvoy's *Naked* [Moscodisc/Diverse DIV 052LP] during other listening sessions, I was comfortable enough with the all-acoustic leanness of 'Isn't It A Little Late?' to use it as a gauge for the way a system can recreate a natural space and an unprocessed voice. To say that I was reminded of a vintage Krell I'd recently heard would be too glib a shortcut as this amplifier delivers its warmth not just figuratively but literally: Ms McEvoy was in the room with me.

I'm not gonna go all purple prose on you and say it nailed her height, hairstyle and dress colour. Suffice it to say, having heard that voice up close mere days before, I was taken aback by the undeniable authenticity and accuracy of the Luxman's delivery. It was enough that the woody, airy sound of a guitar body being thumped spread →

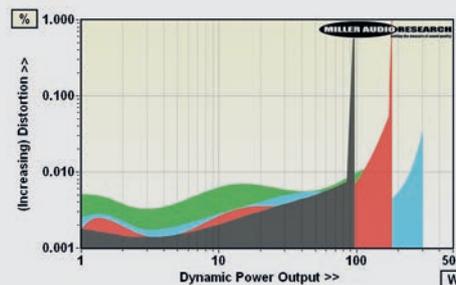
### **CLASSY CLASS A**

Push-pull audio amplifiers – that is, anything that's not a single-ended design – are the electronic equivalent of a two-man saw. Just as with the saw one man pulls while the other pushes, in a push-pull output stage one half pushes and the other pulls. What distinguishes Class A and Class B is whether this sharing of effort is mutual (Class A) or mutually exclusive (Class B). In a Class A amplifier the two halves work together continuously, whereas in a Class B amplifier each rests for half the time, leaving the other to work alone. In more precise electronic terms, in a Class A amplifier both halves of the output stage conduct throughout the signal cycle while in a Class B stage one half conducts for the positive half-cycle only, and the other for the negative half-cycle. This makes Class B operation much more efficient, which is good for your electricity bill, but hand-over from one half of the output stage to the other is nonlinear, resulting in so-called crossover distortion. Class A obviates this issue but at a hit to your wallet. KH

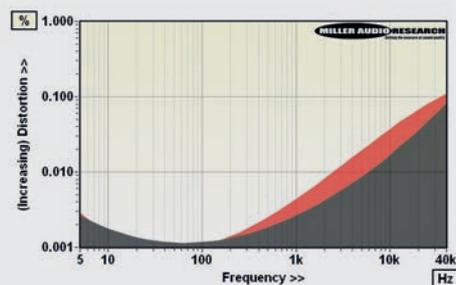
## LUXMAN L-590AXII

I got a real surprise when firing-up Luxman's L-590AXII on the test bench because, unlike the on-line 'reviews' that proclaim this amplifier 'outputs 30W/8ohm and 60W/4ohm' (a fact dotingly reprinted from Luxman's press release and user manual), *HFN* can reveal the figures are actually 2x95W and 2x165W into 8/4ohm. Quite a difference, as I'm sure you'll agree! Perhaps Luxman means that the *first* 30W are delivered in Class A (power consumption at 2x30W/8ohm output is 265W)? Either way, the dynamic output of the balanced power amp section suggests very little additional headroom at 97W and 180W into 8/4ohm with electronic protection activating at 303W and 170W into 2/1ohm loads, respectively [see Graph 1, below]. Still, the maximum 13A current capability (at <1% THD) is muscular enough for a 30-watter.

The A-wtd S/N is 85dB (re. OdBW) – about average for an integrated amplifier of this size and 'density' – while the frequency response shows a very gently tailored HF, amounting to -0.22dB/20kHz and -4.45dB/100kHz but which also holds true into low impedances. This is assisted by the usefully low output impedance, typically an indication of negative feedback, and which holds to 0.024ohm from 20Hz-5kHz, rising slightly thereafter to 0.05ohm/20kHz. Distortion follows a similar trend – very low at ~0.002% from 20Hz-1kHz, then rising to 0.009%/5kHz, 0.017%/10kHz and 0.035%/20kHz [see Graph 2, below] while, versus output level, it holds between 0.002-0.005% from 1W-30W (1kHz/8ohm), increasing to 0.02% at 90W/8ohm. Readers may view an in-depth QC Suite report for Luxman's L-590AXII amplifier by navigating to [www.hifinews.co.uk](http://www.hifinews.co.uk) and clicking on the red 'download' button. PM



ABOVE: Dynamic power versus distortion into 8ohm (black trace), 4ohm (red), 2ohm (cyan) and 1ohm (green) speaker loads. Maximum current is 13.0A



ABOVE: Distortion versus extended frequency from 5Hz-40kHz at 10W/8ohm (black, left; red, right)

## HI-FI NEWS SPECIFICATIONS

Power output (<1% THD, 8/4ohm)	95W / 165W
Dynamic power (<1% THD, 8/4/2/1ohm)	97W / 180W / 303W / 170W
Output impedance (20Hz-20kHz)	0.023-0.051ohm
Freq. response (20Hz-20kHz/100kHz)	-0.04dB to -0.22dB/-4.45dB
Input sensitivity (for OdBW/30W/90W)	19mV / 105mV / 185mV
A-wtd S/N ratio (re. OdBW/30W/90W)	84.8dB / 99.6dB / 104.3dB
Distortion (20Hz-20kHz re. 10W/8ohm)	0.0011-0.035%
Power consumption (Idle/Max. o/p)	218W / 350W (1W, standby)
Dimensions (WHD) / Weight	440x193x463mm / 28.4kg



ABOVE: MM/MC and six line ins (four RCAs, two balanced XLRs) are joined by a tape loop and pre out/main-in options and pairs of switched 4mm speaker connections

into the room like a fine mist, while her hard-to-define tonal quirks were relayed with utter veracity.

I followed it with something raucous, rousing and unrefined: 'Somebody To Love' from Jefferson Airplane's *Surrealistic Pillow* [Mobile Fidelity MFSL 2-456] in mono and at 45rpm. From the cosy, intimate performance of a solo voice and mild percussion to nascent acid rock is like going from camomile tea to Irn-Bru, but it was revealing of the Luxman's prowess.

### LOST IN SPAIN

This thing slayed me with its sheer force, even via that magical, if small miracle from KEF (the LS50). The attack of the percussion was relentless, but the staggering element was the *power* of Grace Slick's vocal. Somehow, she imbued a song about alienation with the intensity of a political tract.

For the Luxman, it was a test to separate the sounds in a mono recording, and give each its head. The slithery guitar against that trashy snare, the pounding bass, and a vocal quavering with rage – it was appropriate that this 49-year-old song sounded so fresh through an amplifier that thinks it's still the Summer of Love.

As this is emphatically a *stereo* amplifier – leave the multi-channel AV to other hardware – it was incumbent on me to feed it with something exhibiting glorious two-channel majesty. I chose to lose myself in 'Concierto de Aranjuez' from Miles Davis's sublime *Sketches Of Spain* [Mobile Fidelity MFSL 1-375]. Is the hugeness of this integrated amplifier meant to serve as a physical manifestation of its way with a soundstage? The spread across the room was gloriously wide, the resonance of the brass focused yet filling sufficient space, while those tell-tale castanets – who

doesn't know what *they* sound like? – enjoyed their own turf. Crisp, clicky, wooden.

CDs were used for testing the line inputs, the Marantz DV8300 SACD/DVD player serving nicely to deliver butt-kicking hard rock via Twisted Sister's 'We're Not Gonna Take It' [*Big Hits And Nasty Cuts*; Atlantic 7567-82380-2]. Dee Snider's snarl, scarily vicious guitar, pounding percussion – check. Gorgeous mono recorded in Capitol's studios in the 1950s, Mickey Katz's 'Duvid Crockett' on *Now That Sounds Kosher!* [Shout! Factory DK30336] sparkled, especially the vibes, while the brass cut through the air with surgical precision.

Nostalgia has chained me to the Detroit Emeralds' 'Feel The Need' [*Greatest Hits*; Westbound CDSEWD 119 CD] and 'Rock The Boat' by the Hues Corporation [*The Very Best Of The Hues Corporation*; Camden 74321 603422 CD]. Both early 1970s, both redolent of the era that the Luxman reconstructs. Punch galore, atmosphere, power – musical instruments, synths, real vocals and more pace-rhythm-timing than a certifiable Flat Earther can handle. But the Luxman sure can. ☺

## HI-FI NEWS VERDICT

As one with no machismo issues about integrated amps, I say wholeheartedly that this is a sane solution for those who want audiophile performance without any aggravation, save for needing ventilation above the unit. But the real bliss-inducement provided by Luxman's L-590AXII is how it lets you return to hi-fi's Golden Age, while producing sound to match modern criteria. Me? I'd buy it for the looks and retro features alone.

Sound Quality: 85%

