

INTEGRATED AMPLIFIER

Krell S-550i

Krell's complement of integrated amplifiers has just doubled: the new S-550i is a response to those who love the neat S-300i but need more power. A *lot* more
Review: **Ken Kessler** Lab: **Paul Miller**

The Editor rarely warns reviewers of a product's strengths or peccadilloes, preferring that we uncover them ourselves. Krell's S-550i integrated amplifier, however, was preceded by two caveats.

It might look compact, something one would heft with aplomb and would welcome precisely because it *isn't* a huge monster of an amplifier. But because Paul Miller is an experienced weightlifter, he tends to forget that the rest of us aren't, and even he was nonplussed by the S-550i's 29kg (that's 64lb, for those of us who still speak English). He said, 'You may need help in unpacking it.'

MONSTROUS POWER

Paul's other caveat concerned its power capabilities. Never one to dupe his staff into blowing up their speakers, he warned me that, despite its size, the S-550i is 'a remarkably *dense* amplifier, probably the most self-effacing yet monstrously powerful integrated we've ever tested.' Those words echoed around my head the first time I switched it on from standby: a nerve-wracking initial exposure which was exacerbated by a thump of a kind to set one's heart racing.

Beyond those warnings, all that I was told was that it retails at £4998 and is Krell's new 'flagship' integrated, replacing the FBI – the S-300i remains as Krell's entry-level integrated at £2795. The S-550i is a true 'big brother' – the sonic resemblance is uncanny save for a brutal power delivery.

While the front panel suggests minimalism, that's only because all minor settings are relegated to a menu system, eg, balance setting and input trim, which can also be accessed by the full-function remote. If you were put off by units with 50 or more controls – a certain Nakamichi preamp of yore springs to mind, along with a host of home cinema amps – the S-550i

will delight you because its fascia offers only source select, volume, mute, power on/off (from standby) and a menu display.

Inside is circuitry that recalls the S-300i and a preamplifier section that can be used on its own via a pair of phono outputs at the back, and which is said to boast circuitry derived from Krell's top-of-the-line Phantom preamp. The recipe reflects long-standing Krell practice, with the company's proprietary Current Mode technology, discrete direct-coupled circuitry in a balanced topology, and individual power supply regulation. Much of the weight is attributed to a massive 1750W toroidal transformer that shifts the weight of the amp toward the front.

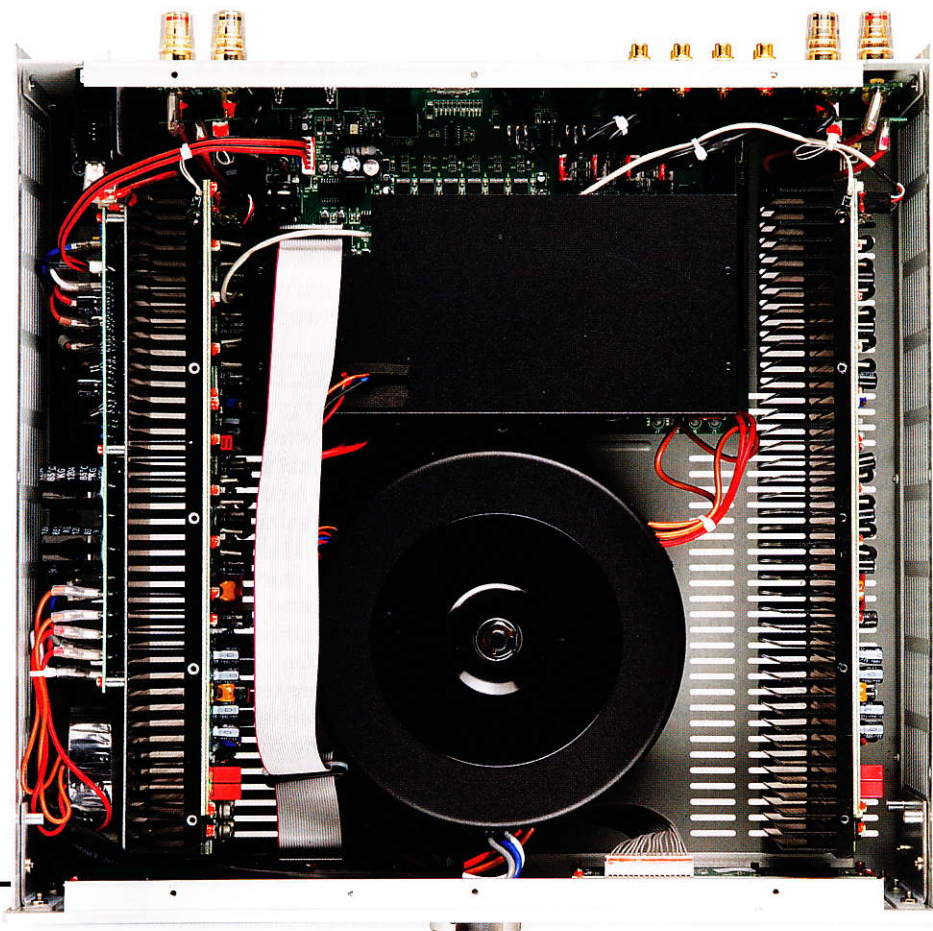
Other circuit details include: no negative feedback used 'or required'; a volume control consisting of a balanced

resistor ladder; one set of balanced XLR inputs along with four single-ended phono inputs; plus a dedicated iPod/iPhone dock. Krell supplies the necessary dock, so there will be no tears for those who arrive home with this chunk o' metal, eager to hear what it does with an iPod, only to find a lack of a dock. This unit is ready to handle whatever you want to feed it.

As the conservatively-rated 275W/ch power output all but doubles when speaker impedance is halved, this begged to be connected to the Apogee Scintillas. I'm deliberately *not* reporting what happened, but I will say that I'm no longer pessimistic about that speaker's future should there ever be a shortage of circa-1983 Krells on the secondhand market.

But that was then and this is now. Krell was one of the first companies to embrace

RIGHT: Interior of the chassis is dominated by a huge toroidal mains transformer feeding L/R power amps mounted on heatsinks. There are seven pairs of power transistors per channel!





the custom installation market – despite this unit being a deliciously purist two-channel product, its rear panel offers 12V trigger sockets, RS232 and ‘Theater Throughput’ connectivity. It even comes with rack mount ‘ears’ for housing in a professional stand. Various parameters can be customised via the menu system.

Aside from the worrying switch-on thump, the S-550i is easy to set up. I used it with an iPod Classic, the Marantz CD-12/DA-12 in balanced mode and Wilson Audio Sophia 3 loudspeakers.

NOTHING TAXES IT

Where to start? When the promise of unbridled power is dangled in front of a hi-fi casualty, all manner of dark, fell practices cross one’s mind. Fortunately, I am both too sensible to want to destroy a brace of tweeters, and too conscious of what tinnitus would do to me should I play with all of this amplifier’s power into the more than willing Wilsons. But, damn, this can swing from soft to loud with the graceful progress of a Bugatti Veyron’s W16 climbing to its kilo-ponies.

So, did I dig out Mountain’s ‘Mississippi Queen’? Some Iggy, some Ozzy, some Lemmy? No – nothing of the sort. I tested the Krell, during those first moments, with the antithesis of such an onslaught: Eleanor McEvoy’s ‘God Only Knows’ from *If You Leave...* [Moscodisc MOSCD4010].

I needed to learn if the Krell could handle *delicacy* as well as it would (without question) cope with headbanging abuse. After all, a Veyron can burble along in traffic without stalling or overheating.

It is an invigorating, rewarding and even life-affirming experience to find that one’s preconceptions are 180° out of synch with reality if, of course, that 180° shift is positive rather than negative. No brutality, no coarseness, no lack of finesse: the S-550i placed Ms McEvoy in the room, her piano tinkling and resonating with the realism I take for granted from the Audio Research REF75, in all its tube-y glory.

This was a solid-state amplifier free of the brittle, of the glassy, of the jarring.

Of course, we are so far down the path of the transistor’s evolution that any throwback to solid-state hardware of the 1960s would never be allowed to escape from its maker’s warehouse. Indeed, it was Krell’s earliest Class A designs that set (and for some, maintain) the standard by which transistor amplifiers of robust output should be judged. The sound of this minimalist recording, of a voice I have heard from but two feet away, was as satisfyingly real as one could hope to experience.

“I Want To Ta-Ta
You Baby” was
pure, liquid blues –
salacious, smoky”

ABOVE: A perfect front panel for those who hate clutter, the S-550i’s contains just buttons for sources and mute, on/off from standby, volume and a menu to access lesser commands

Because of its very refinement, the recording hardly taxed the Krell, any more than it had ‘worked’ the Micromega MyDAC before [HFN Jun ’13]. What the track asked of the S-550i was to reproduce its detail, spatial concerns, texture and authentic tonality. The performance never demanded of the Krell a swing from soft to ear-shattering. But it did expect the S-550i to remain as poised and as composed as the performer.

Delicate keyboard fingering, matter-of-fact vocals possessing a unique charm, to contrast with the import of the lyrics – pure emotion oozed from every note, but

free of melodrama. So, too, did the Krell remain collected, unruffled, even suave – if an amplifier can exhibit such a trait.

Much as I wanted to stick to that disc, I couldn’t resist the edgy, scorching axemanship of Johnny ‘Guitar’ Watson’s ‘I Need It’, two-and-a-half-minutes in, and preceded by punchy horns and a percussion opening that surely must have been sampled by seven-figures’ worth of copyists. The stand-out from 1976’s *Ain’t That A Bitch* [Sequel NEM CD 774], it features staccato playing so evocative of that era, all *Superfly* and wide lapels and huge shades.

Punch, attack, crisp edges, no decay – the Krell managed every sweep of brush on cymbals, the fast plucking with a hyper-metallic edge. And yet the next track, ‘I Want To Ta-Ta You Baby’, was pure, liquid blues – still with the cutting snap of the strings, but slithery, salacious, smoky. A perfect horn section, mixing long, airy sighs with decisive ➔

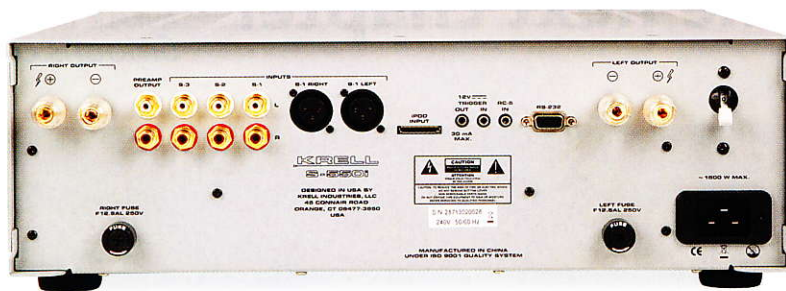
KRELL’S LEGACY

Krell’s enduring legacy is that of a high-end brand with a penchant for power. I’ve lost count of the number of Krell amplifiers that have served time in my system, but not one can be recalled for any lack of power.

It must be remembered that Krell first made its presence known by being able to drive seemingly impossible loads, most notably the various Apogee full-range ribbon speakers (especially the Scintilla). Thirty years ago, Krell amps were the default choice for something unbreakable, unbowed by ‘difficult’ loads. The S-550i continues this tradition, but with one or two nods to the 21st Century, including its iPod dock. For those who might wonder how so much can be offered for a relatively reasonable £4998 – and that *is* ‘reasonable’ in the context of amplifiers of this power delivery – one needs to look at the small print at the back. ‘Made in China’ it says.



INTEGRATED AMPLIFIER



ABOVE: In addition to multi-way speaker terminals, four unbalanced line inputs and one balanced input, this unit accepts an iPod dock (supplied), a complement of home automation inputs and main power on/off in the upper right corner

punctuation, the Krell arrayed it behind Watson, creating a backdrop with the curve of Venus's shell, but wider and taller. It was a perfect, seamless, Spectorian wall of sound, only stretching from wall to wall, rather than throbbing as a round mass in the centre.

GOING ALL SPINAL TAP

Without wishing to contradict my oft-stated aversion to ear-bleeding levels, I must admit that – on occasion – I do go all Spinal Tap on my system, if both the mood and the music invite it. Oddly (another admission) I do not necessarily mean music that begs copious levels, such as 'I Can't Explain' by the Who, or ZZ Top's 'Gimme All Your Lovin'', songs that simply cannot be played softly. Instead, I base my volume settings according to the vocalist's angst.

Why I am currently undergoing a Glen Campbell obsession has much to do with his acclaimed farewell album of last year. As one of the most intensely tortured songs I've ever savoured from the country milieu is Conway Twitty's sublime 'It's Only Make Believe': I was delighted to find it on Campbell's *Collection* [EMI Gold 243 5 77507 2 1], and played it to death while reviewing the MyDAC.

It builds to an intensity that is almost disturbing, a mass of instruments and voices as grandiose as the J Geils Band's 'I Can't Believe You' or Dolly Parton's reading of 'Put A Little Love In Your Heart'. Campbell soars, the key changes lifting him up, up, up to a point where you think his voice just has to crack. It doesn't.

Neither does the Krell. The form, the scale, the sheer power were so capably, competently resolved that to ask more would be to exhibit the selfishness of some cretin on *The Only Way Is Essex*.

Inevitably, though, one must bang head if one is to exploit the power of the Krell in a brutal manner, rather than as a means of preserving dynamic swings or other bombast-free uses of a surfeit of wattage. With iPod in hand, I played Led Zeppelin's 'Good Times Bad Times' from the *Mothership* collection, an MP3 download.

Aaah, Bonham's percussion! 'Massive' is one of those words like 'awesome' or 'epic' that has become robbed it of its true meaning and impact, but there is no other word to describe the sensation. The man abused those drums, beat them like a crazed version of a Roman galley's *pausarius*, and the power was palpable. Beneath it was John Paul Jones' rich, mellifluous bass. The Krell offers both a podium.

Never did the Krell miss a beat. And never did I miss separates. ☺

HI-FI NEWS VERDICT

There have been massive integrated amplifiers in the past, such as Perreaux's Eloquence 250i, which obviate a need for separates. Without hesitation, I nominate the S-550i as a perfect choice for those who want unbridled power yet will not or cannot house two components. It is a beast of an amp, such that I think I've found something currently available to drive even Scintillas. Yes, *that* kind of beast.

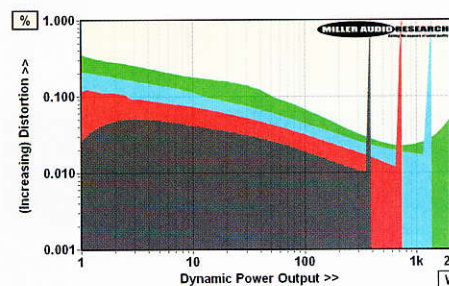
Sound Quality: 87%

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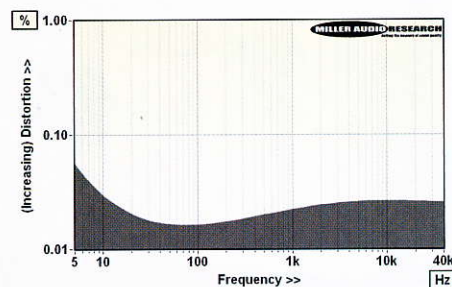
KRELL S-550i

The amplifiers may be separated by some four years but the new S-550i bears a striking technical resemblance, extra power notwithstanding, to Krell's own S-300i [HFN Feb '09]. Both amplifiers share a distinctive distortion pattern of 3rd, 5th, 7th and further odd harmonics that are highest at low power (~0.065% at 1W/8ohm) but then reduce with increasing power to ~0.035% at 10W, ~0.012% at 100W and 0.008% at the rated 275W/8ohm. This trend, incidentally, is also shared by darTZeel's extraordinary NHB-458 monoblocks [HFN Jun '12] and is consistent under continuous or dynamic output conditions [see Graph 1, below]. The latter graph also illustrates the S-550i's prodigious capacity, its 2x275W/8ohm rating exceeded to the tune of 2x335W/8ohm and 2x600W/4ohm and lifted still further to 390W, 750W, 1370W and 2400W into 8, 4, 2 and 1ohm loads under dynamic conditions. This makes the S-550i the most powerful and load-tolerant integrated that we've tested in HFN for many a year (if not ever).

The amp's output impedance is not vanishingly low at ~0.075ohm but it is very uniform across the audio range, as is its frequency response almost irrespective of load (~2.05dB/100kHz into 8ohm to ~2.25dB/100kHz into 1ohm). Like the S-300i, however, the S-550i also shows an 'engineered' mid-bass bump of up to +0.05dB from 50Hz-300Hz just as its overall A-wtd S/N ratio is about 10dB *lower* than the 'average' integrated at just 73.4dB (re. 0dBW). Like the S-300i this is not hum but a broad white noise that may exert some pleasing subjective influence. Readers may view an in-depth QC Suite report for Krell's S-550i integrated amp by navigating to 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. THD falls as power increases



ABOVE: Distortion versus extended frequency from 5Hz-40kHz at 10W/8ohm. Trend is fairly uniform

HI-FI NEWS SPECIFICATIONS

Power output (<1% THD, 8/4ohm)	335W / 600W
Dynamic power (<1% THD, 8/4/2/1ohm)	390W / 750W / 1.37kW / 2.4kW
Output impedance (20Hz-20kHz)	0.070-0.083ohm
Frequency response (20Hz-100kHz)	+0.05dB to -2.0dB
Input sensitivity (for 0dBW/275W)	71mV / 1200mV (balanced)
A-wtd S/N ratio (re. 0dBW/275W)	73.4dB / 97.8dB
Distortion (20Hz-20kHz re. 10W/8ohm)	0.055-0.016%
Power consumption (Idle/Rated o/p)	81W/978W (2W standby)
Dimensions (WHD)	438x148x450mm