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# Krell Vanguard

Though massive powerhouses continue to define Krell, their entry-level integrated amps are the industry's best-kept secrets. The new Vanguard continues the tradition  
 Review: **Ken Kessler** Lab: **Paul Miller**

**M**ade in the USA: funny how four little words can be such a game-changer. Krell took some unwarranted stick because its uncommonly desirable S-550i [*HFN* Jul '13] was made in China, and a malevolent wing of the enthusiast community just couldn't let it go. Lesson learned, as the back of the new £4500 Vanguard proudly states 'Made in the USA'. All that's missing is four bars of Springsteen when you switch it on.

## DIGITAL MODULE ON THE WAY

Sharing the look of the Krell Duo 300 power amp [*HFN* Oct '14], the Vanguard is a slightly lower-powered (200W versus 300W) integrated derivative. We are reviewing the entry-level, line-only analogue version. A panel on the back beckons the fitting of a digital module currently in preparation that will add: Bluetooth aptX wireless connection for streaming from computers, smartphones and tablets; two HDMI inputs and an HDMI output; one each of optical and coaxial inputs, as well as the activation of the front panel-mounted USB input.

For those who wish to buy a Vanguard now, the price of the module has not yet been announced, but rest assured it can be fitted by a dealer after purchase. Also enabled by the upgrade is Ethernet music streaming, controlled through dedicated iOS and Android apps.

The Vanguard's bold look owes much to the chassis design and construction of the new Krell Foundation preamp/processor, hence the bulge on the front panel as per the Duo. Inside is a typically massive power supply with a 750VA toroidal transformer worthy of overseeing an amplifier with the above-cited output, which doubles to a claimed 400W into 4ohm [see Lab Report, p55]. It also runs coolly thanks to a pair of surprisingly quiet, thermostatically-controlled fans.

**RIGHT:** A single 750VA toroidal transformer (with multiple taps) feeds independently-regulated supplies for the Class A preamp and proprietary, fan-cooled power amp

Krell's Illusion preamplifiers provided the topology of the balanced and fully-discrete Class A preamp stage. Moreover, like earlier Krell integrations, it offers user-configurable options viewed from a rather archaic display on the right that reminded me of my circa-1983 Tandy TRS-80 portable computer. To the designers at Krell: I've seen £69 MP3 players with better displays!

Once you get past the vintage dot-matrix graphics, the panel accesses a menu to allow you to configure input naming and input level trim. At the back, along with the Ethernet and remote control inputs, are three line-inputs labelled S1, S2 and S3 in traditional Krell fashion, plus one stereo balanced input

using XLR. The latest generation gold-plated WBT speaker terminals are a joy to use, and accept bare wire or spades. Also at the back are a three-pin IEC mains input and the primary power on/off switch.

While the remote is filled with 35 buttons, most await the aforementioned digital module and the option of controlling a Krell CD player or transport. What the all-metal remote control duplicates from the front panel are the power on/off, the diamond pattern of five buttons for navigating the menu and adjusting volume, plus three buttons for source, menu and mute.

That impressive bit of sculpture in the middle of the fascia contains lighting which





glows red in stand-by and blue in operating mode. To its right are the menu display, which lights up when you change source or volume, the IR sensor below it, and a USB input above. Just about the only thing Krell left off, no doubt to the consternation of younger or more modernised listeners, is a headphone socket.

All of this is housed in a compact chassis. This being a Krell, it weighs a not inconsiderable 17.7kg out of the box, chunky but manageable and easily unpacked by one person. And thanks to the lack of clutter combined with clear labelling, it's up and running in minutes.

### A WIDE SOUNDSTAGE

I assessed this with a wide range of products, not presuming that everyone buying a £4500 integrated amplifier will be running £5000+ speakers. I used the Vanguard with Wilson Audio Alexias, but also Spondor LS3/5As. Sources included line outputs from the Pono and Astell & Kern digital audio players, and Musical Fidelity's M1 CDT CD transport via Cambridge's DacMagic Plus. Cables were Crystal Ultra, including the mains cable.

Tempted though I was to dig out albums on the Vanguard label, I stuck with titles

'With this amp, mono recordings enjoyed a real sense of depth'

that I've been using for regular reviewing duties, or those I know so intimately that they're second-nature. And I'm glad I did, because one proved revelatory: The Kinks' *Arthur (Or The Decline And Fall Of The British Empire)* [Universal 273 227-4].

It was this disc that revealed instantly the Vanguard's prime strength. This plays on a theory I have that's both unsubstantiated and illogical, but it's kept me sane for years, so here goes: I firmly believe that every hi-fi component demonstrates some form of synecdoche that embodies or defines its essential nature. An example would be the sparkling treble of Decca cartridges. What this album exposed in seconds is that the Vanguard creates a fabulously wide soundstage.

Note that I said 'wide', because its front-to-back stage depth is merely OK. But if you like broad vistas, this amp has a wall-to-wall spread, without adding any holes in between that shouldn't be there. Central

**ABOVE:** As with previous Krell integrations, there is a welcome lack of clutter. Pressbuttons to the left choose sources and set levels, while accessing the menu viewed to the right

images were solid and properly positioned, but the extremities were just as clearly defined instead of entering some cloudy morass. In the alternate version of 'Drivin'' the far right acoustic guitar's harmonics bled in just enough to create a sensation of air between it and Ray Davies' vocals.

To the left and slightly forward, the harmonising Kinks and tinkling piano sounded like a Greek chorus, with their off-stage presence adding a proscenium effect. Gentle drums at the back... it was all-embracing yet utterly two-channel. This amplifier knows how to resolve image placement with the finesse of a Denon DL103 moving-coil cartridge.

Curiously, the Vanguard seemed to betray its ancestors with bass that reminded me more of valve amplifiers than solid-state behemoths. Infatuated as I am with The Four Seasons due to the spell cast on me by *Jersey Boys*, I couldn't resist

'Big Girls Don't Cry' on *Jersey Beat* [Rhino Box Set 8122795939], the snappy bass enjoying – as it does on most early Four Seasons' hits – a key role, along with substantial percussion. With the Vanguard, it was free of any aggression of the solid-state variety.

And yet transient attack was more than satisfying, also vividly evident with the brass punctuation. If this

seems mildly schizophrenic, I'm at a loss to explain it: the effect was consistent from CD to whatever transition is undertaken via Pono. It was even more noticeable with the opening to 'Walk Like A Man', though the Vanguard conveyed all of the weight →

### KRELL'S INTEGRATION

Krell is a serious participant in custom installation and home cinema, so the Vanguard offers a 'Theater Throughput' mode, and 3.5mm jacks for IR input and 12V remote trigger input and output. There are even optional rack-mount ears, as custom installers like to hide the kit.

Given the sophistication of the installation market, Krell has a web server to provide an interface for viewing and setting up the various parameters – eg, via iPad – when the unit is connected to an active network, accessed via the rear-panel Ethernet connection. The display, reminiscent of operating screens from home automation products such as Crestron's, monitors temperature, levels, source in play and other functions.



## KRELL VANGUARD



**ABOVE:** The Vanguard accepts three line inputs plus one balanced (XLR), along with Ethernet and power triggers. Blank plate covers aperture for optional digital card

that recording possesses. And we're talking mono.

Which reveals another strength, if not one as impressive as the soundstage width: this amp resolves layers of sound such that mono recordings enjoy a sense of depth on a par with the admittedly truncated front-to-back stage of the Vanguard playing stereo CDs.

### FITS IN WITH THE SYSTEM

Bob Dylan's *Blonde On Blonde* [Mobile Fidelity UDSACD 2097] – using the CD layer – was a great showpiece for vocal textures, following a few hours' worth of Frankie Valli's falsetto.

One needs a sense of humour to wallow in the weirdness that is 'Rainy Day Women #12 & 35' and its drunken feel superimposed on a militaristic beat. Dylan's near-sneer presents a contrast with the Dylan of nearly a half-century later, but the Vanguard integrated presents enough detail to portray both with absolute precision.

The transfer of the title track on George Formby's *When I'm Cleaning Windows – His 52 Finest 1932-1946* [Retrospective RTS 4104] is a fabulous means of finding out what a full-range system can extract from what must surely be a limited bandwidth recording – but it was no less satisfying than much newer recordings. While the spectacular ukulele break wasn't as clearly delineated as I've heard through much dearer integrations, it was still a source of wonder.

By this stage, I was in a quandary. The S-550i had left me speechless because of its seemingly unlimited power, but it lacked a digital option: crucial in the current climate. And

although the Vanguard sounds less muscular, less authoritative, it may be more 'listener-friendly'.

The late S-550i reeked of audiophilic precision, demanding sources and speakers that probably inhabited a price category well above it. Still, it was a bargain of a powerhouse regardless of its Asian origins. The Vanguard, too, is a bargain, but of a different sort: it seems more forgiving of the rest of one's system. It rose to the brutal challenge of the Alexias, if not quite testing its bottom octaves, while it also seemed at home with small monitors like the LS3/5As.

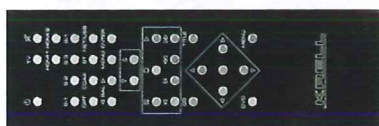
Throw on *Kodo: Heartbeat Drummers of Japan* [Sheffield Lab CD-KODO] if you want to hear what it does in the lowest reaches of one's hearing. Fat and rich, with sufficient attack, if not quite delivering the hammer-blow of the S-550i.

If a component can exhibit 'attitude', then this amp never sounds snuffy about what it's fed, nor what it is feeding. I even had a quick burst with the sub-£120 Pioneer SP-BS22-LR speakers. OK, they belie their size and price, but they're hardly what you'd hook up to an amp costing £4.5k. The Krell loved 'em, made 'em sing. ☺

### HI-FI NEWS VERDICT

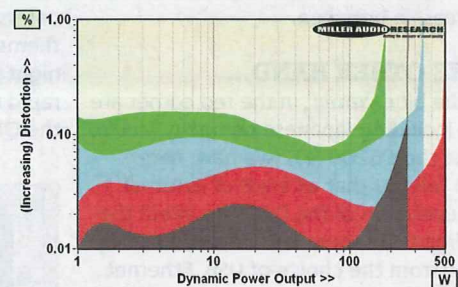
By now, you must know what to expect of Krell: the Vanguard is a solid, commanding performer, and in this guise, something of a bargain. Maintaining a Krell tradition, it is minimalist in its fascia accoutrements, without sacrificing anything important. Add a balanced input, full remote control, user-adjustable settings and the forthcoming digital module, and you'll have a 'proper' Krell for the 21st century.

Sound Quality: 86%

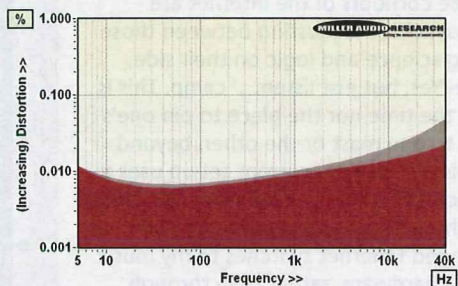


Rated by Krell at 200W/8ohm, its Vanguard amplifier achieves a higher output in practice – 2x250W/8ohm and 2x380W/4ohm with sufficient headroom to accommodate peaks of 270W and 510W into 8 and 4ohm loads under dynamic conditions (all <1% THD). A tight 13.6A current limit restricts the output to 350W/185W into 2/1ohm [see Graph 1, below] making the Vanguard about half as capable as Krell's 300 Duo [HFN Oct '14] into low impedance speaker loads. While Krell's literature states the Vanguard 'borrows design and construction from its iBias amplifiers' it's still not particularly clear whether the power amp is actually an iBias topology or not. Power consumption is improved over the 300 Duo at 74W (idle) while its distortion characteristics are different – the Vanguard offering a far steadier 0.015-0.025% THD over its full 200W rated bandwidth with a 0.0067–0.017% spread at 10W/8ohm from 20Hz-20kHz [see Graph 2, below].

Its frequency response has a flat treble out to –0.13dB/20kHz, falling to –2.1dB/100kHz, while the 0.067-0.09ohm output impedance suggests there will be minimal variation with speaker load over the 20Hz-20kHz audio range. The S/N is only a little above average at 89dB (re. 0dBW, balanced input) but the Vanguard does offer an (unnecessarily) huge 48dB gain. Just 11mV input is required for a 1W/8ohm output. The Cirrus CS3318-based volume control offers unity gain at its '072' setting with 32dB of range over the top 50 steps from '100' to '150'. Readers may view an in-depth QC Suite report for Krell's Vanguard 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 13.6A



**ABOVE:** Distortion vs. frequency from 5Hz-40kHz at 10W/8ohm (left = black; right = red)

### HI-FI NEWS SPECIFICATIONS

Power output (<1% THD, 8/4ohm)	225W / 380W
Dynamic power (<1% THD, 8/4/2/1ohm)	270W / 510W / 348W / 185W
Output impedance (20Hz–20kHz)	0.067–0.09ohm
Frequency response (20Hz–100kHz)	+0.01dB to –2.06dB
Input sensitivity (for 0dBW/200W)	11mV / 162mV (Balanced in)
A-wtd S/N ratio (re. 0dBW/200W)	88.8dB / 111.8dB
Distortion (20Hz-20kHz re. 10W/8ohm)	0.0067–0.017%
Power consumption (Idle/Rated o/p)	74W/650W (10W standby)
Dimensions (WHD) / Weight	434x105x445mm / 17.7kg