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ULTIMATE GROUP TEST STEREO VS MULTICHANNEL AMPLIFIERS

FEATURING...

- > Arcam DiVA A80
- > Denon AVR-2803
- > Creek A50iR
- > Pioneer VSX-AX3
- > Roksan Kandy KA-1 MkIII
- > Sony STR-DB790
- > Rotel RA-1062
- > Yamaha RX-V1400RDS



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SUPER AUDIO KRELL

Krell's first foray into high-resolution multichannel music replay plumps for SACD

PRODUCT Krell SACD Standard

TYPE Stereo & multichannel CD/SACD player

PRICE £4,244

KEY FEATURES Size (WxHxD): 44x15x12cm

Weight: 11.4kg • 4 user-selectable SACD replay filter settings (2 for CD) • Custom install features

Balanced and single-ended analogue outputs

CONTACT ☎ 020 8971 3909

www.krellonline.com

In the ongoing battle between the two high-resolution music disc media, DVD-Audio and SACD, the latter remains well ahead in software, and has made inroads with an expanding number of key hardware manufacturers now actively supporting the format. Significant new 'universal' audio/video players like Denon's DVD-A11 and Linn's Unidisk 2.1 are helping drive SACD inexorably towards critical mass, and the format is also gathering support from key high-end audio specialists, the likes of Musical Fidelity and Classe brandishing high-quality dedicated players. Now the doyen of the high end, Krell, has joined the party with its own player, the SACD Standard – a relatively 'inexpensive' (in Krell terms) dedicated model designed for all types of single and dual-layer SACDs and CDs.

The SACD Standard is a true SACD player – not a DVD player (DVD-Audio or otherwise) which also plays SACDs. The difference is that there is no video element, which eliminates at a stroke the compromises that plague many combination players and which at this quality level tend to hamstring their performance. The SACD Standard makes a natural partner for the similarly packaged Krell DVD-Video player, the DVD Standard.

The impressively fortress-like non-magnetic alloy structure is built from fabricated U-shaped side channels and flat horizontal panels screwed onto a rigid chassis, with solid rounded caps with a polished finish at each corner providing additional reinforcement and a separate structural enclosure for the mechanism. Appearance is a close match for

Krell's Showcase amp components which might be naturally used with multichannel SACD, and also for two-channel purposes from SACD and CD. The Showcase system in its various guises has long shown that it is as capable in stereo as in multichannel.

Inside, the player's Philips mechanism feeds a dual differential DAC stage using three Burr-Brown PCM 1738 hybrid 24-bit D/A converters, which have enough bandwidth to cope with DSD data, with a part-multibit, part-bitstream division of labours. The audio gain stage uses Krell's current mode topology for the main channels, though not for centre and surround. The differential converter configuration makes it a simple matter for it to drive the balanced mode output directly, though a single-ended RCA phono output is





“With SACD, although the sound remains similar to CD, the player sustains a much more complex sound picture.”

also available as usual. Digital optical and electrical outputs are fitted, but they're disabled when playing SACDs in the usual way. Other rear-panel fittings include an infrared input and a 12V trigger for integrating with a custom install system, and an RS222 port for third-party controllers.

Control is available from a beautifully made slimline remote which is a little larger and thicker, but otherwise similar to a credit card remote, or by using the matrix of very tiny buttons on the front panel. For the most part the control options are self explanatory. Exceptions include the SACD/CD button, which selects the part of a disc to be played (stereo or multichannel SACD, or stereo CD), the selection remaining with each disc inserted until changed. A switchable filter provides two settings for CD and four for SACD. With CD, Filter 1 is flat to 20kHz with a sharp brick wall filter, and Filter 2 offers a more gradual roll-off, but more in-band attenuation (-3dB at 20kHz). With SACD, Filter 1 has the widest bandwidth (180kHz) and the slowest out of band roll-off, while Filter 2 operates up to 75kHz with a more rapid roll-off and 0.5dB extra gain across the audio band. Filter 3 (SACD only) covers up to

80kHz with a relatively steep roll-off and a massive +5.5dB gain across the band, and Filter 4 is specified up to 90kHz, with a slower roll-off and +3.5dB overall gain.

SOUND QUALITY

First task in the listening sessions was to ascertain whether or not SACD sounded consistently better than CD. Unless the player passed this rather fundamental test, the SACD Standard would have to be regarded as at best an honourable failure, with SACD simply filling the role of CD sound through extra loudspeakers – a travesty of what the format is about. The way this was assessed was to compare the nominally identical CD and stereo SACD recordings on a number of hybrid discs. There are dangers in this approach as the two recordings may not be of equal provenance, but given a large enough selection of discs, a pattern should emerge.

And it did. The Krell was more than capable of demonstrating the inherent superiority of SACD, which is not always so clearly apparent through lesser players. A key difference that remained consistently identifiable in nearly every case was what might be described as a widening of the musical focus. From CD, lead

instruments and voices tend to hog the attention, while low-level background singers and supporting instruments tend to lose distinctiveness, audibility and focus. Time after time with SACD, although the sound remained tonally and dynamically similar to CD, the player sustained a much more complex sound picture, without losing the thread of background events. The effect is like looking at a scene through a small hole which restricts peripheral vision, and then taking in the whole scene at once – a much more complete and satisfying experience.

But there is another generic difference, related to the fact that SACD is both more subtle and less obvious. CD tends to reproduce leading transient edges particularly clearly, more so perhaps than is always justified. SACD recordings through the Krell generally sounded more organic and fluid, which with lazy listening could be mistaken to mean a lack of impact, just as good analogue sound can be written off for similar reasons.

The remaining task was to place the player in the firmament of its peers, both as a CD and SACD player. We briefly auditioned the SACD Standard playing CDs against Krell's flagship CD player, the KPS25, at a public

Q & A



Dan DiAgostino, chief executive officer and chief engineer of Krell Industries Inc talks about the SACD Standard

HFC: What are the key points in the design of the SACD Standard?

DDA: The output stage is extraordinarily good. It's been done with discrete parts with an extremely wide bandwidth using current mode gain stages on the main front channels in a fully balanced configuration. There are no op-amps in this part of the circuit at all. The centre and surround channels are slightly simpler and use voltage gain, and although we do use op-amps, they are not in the output section. Most of the circuitry is housed on a huge PC board taking up much of the space inside the box, and is fully surface mounted. It has a very high component count, though its size makes it rather deceiving.

Please explain the double chassis construction.

The mechanism is housed at the bottom of the player in a metal box with screening across the top which gives it a great deal of stability. The main circuit board is mounted above.

A lot of emphasis appears to have gone into the power supplies.

It has. The analogue section has its own transformer and power supplies, and the transport has its own digital dedicated switch mode supply, which is very effectively screened and positioned a long way from any circuitry that it could interfere with.

Why did you decide to base your first high-resolution player on the SACD format rather than DVD-Audio?

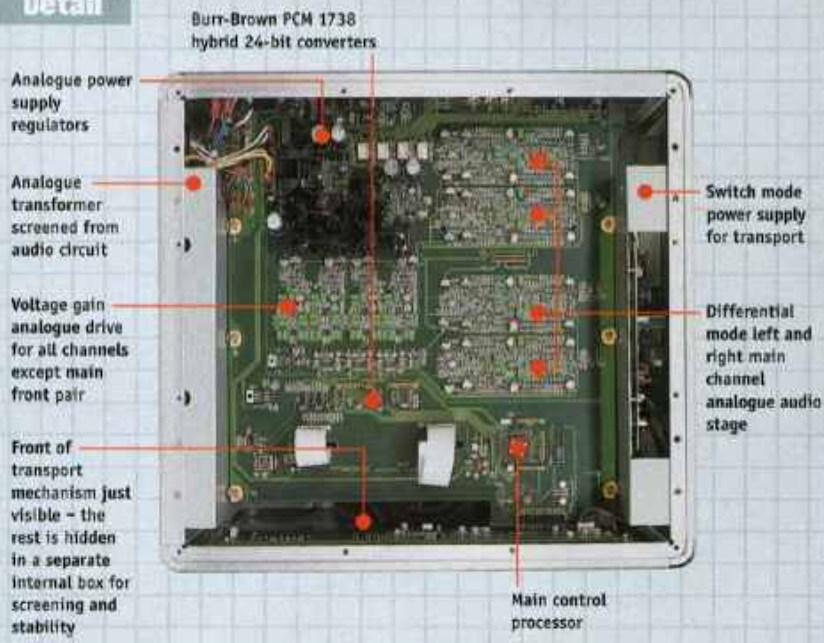
I like both formats, but the decision I took was based on the fact that there is much more software around on SACD. It is the format that we believe has the best chance of surviving in the long term. I'm not as confident that DVD-Audio will survive as long.

Does this mean that Krell has no ongoing interest in DVD-Audio?

Not at all. We've been working on DVD-A playback for some time and we will be releasing a player, but it will be a universal DVD-A/SACD player.



Detail



show, and have used the KPS25 extensively on other occasions, and know that it's in a different class. But we're talking here about chalk and cheese - a £4.5K SACD player and a £25K CD player/preamp which is one of the most consistently capable CD playing engines ever devised. At its particular price point, the SACD Standard is a vibrant and engaging CD player, which has softer bass and less of what can only be called 'slam' or 'power' than the senior model, but which is otherwise difficult to fault. This is not just a routine CD player when SACDs are put aside. It offers excellent three-dimensional imagery, a high level of detail and a very sweet top end which is completely free of grain and hardness. But the balance leans perceptibly towards precision and clarity of line rather than sonority when compared to, say, the Mark Levinson 390S.

As an SACD player the Krell is one of the best we've heard, its sense of detail even better than with CD. Given source material of appropriate quality it is nothing short of exquisite, and with favourable recordings (the Benjamin Zander *Mahler 6*, the Boulez *Song Of The Earth* and Chailly's *Turangalila* are three discs that figured prominently in the tests) the ability of the Krell to cast light into

the deepest recesses of the very complex scores was utterly thrilling. But the Krell would also show in unequivocal terms when a recording had gone wrong - witness the recent SACD of Gergiev's *Shostakovich 7* on Philips, where the DSD mastering was made from a grainy-sounding 48kHz/24-bit PCM master. High resolution, no less. **HFC**

Alvin Gold

VERDICT

SOUND >> 94%



FEATURES >> 87%



BUILD >> 96%



VALUE >> 84%



PRO

This player provided many hours of truly compelling music making, to the extent of sometimes making it difficult to concentrate on the job at hand.

CON

If you want DVD playback in your multichannel system, you'll need an extra player. No speaker management or SACD-capable digital output.

CONCLUSION

No technological quantum leap perhaps, but it defines the quality standard for SACD players at its price point. The fact that it's also a superb CD player adds to the attraction, but it's the SACD performance that will win this player most plaudits.

HI-FI CHOICE OVERALL SCORE >> 90%