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HI-FI CHOICE

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Why Krell's new CD/SACD player is the world's best

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floorstanding speakers

IN-DEPTH TESTS
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▲ **GAMUT** New CD player is a gripping musical performer

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ULTIMATE GROUP TEST >>>
AMPLIFIERS

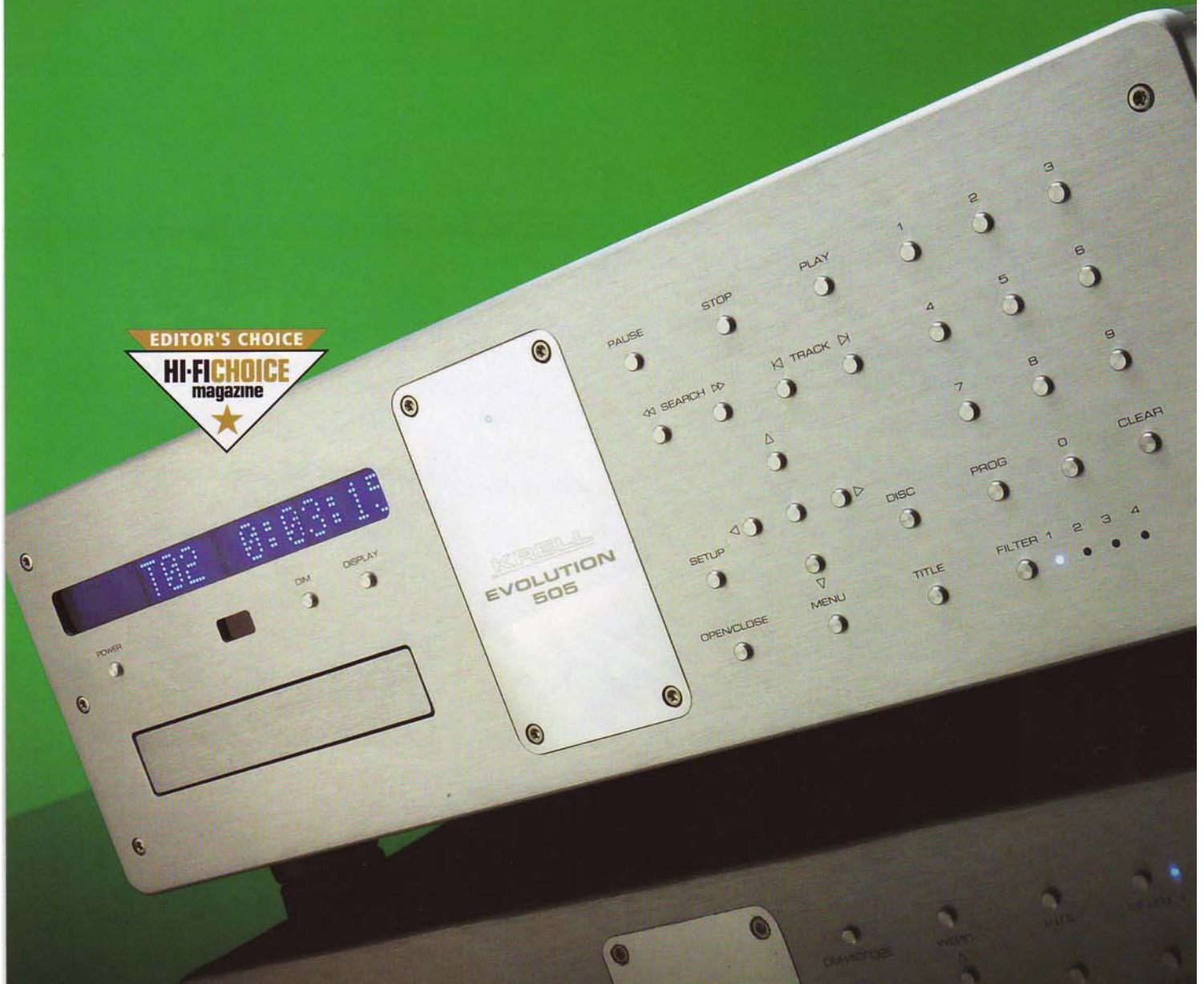
FEATURING

- > Arcam DiVA A70
- > Creek Evo
- > Marantz PM7001 KI
- > NAD C372
- > Onkyo A-9555
- > Rotel RA-06

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EDITOR'S CHOICE

HI-FI CHOICE
magazine



Darwin's delight

Krell's SACD Standard player has evolved into something stunning

PRODUCT Krell Evolution 505

TYPE CD/SACD player

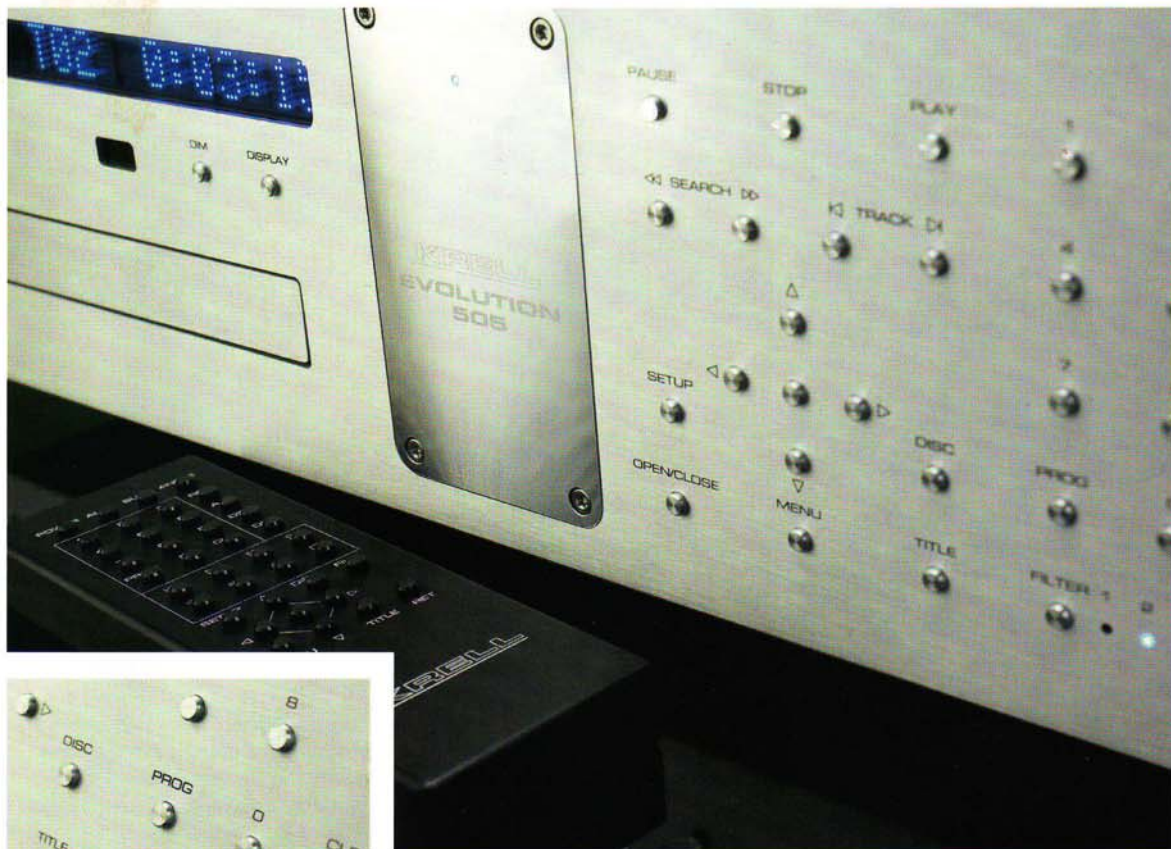
PRICE £8,777

KEY FEATURES Size (WxHxD): 43.8x15.3x43.8cm
● Weight: 16.8kg ● Analogue outputs: single-ended (two and six channel) RCA phono, balanced XLR (stereo only), Krell CAST connection (stereo only) ● Digital outputs: coaxial, optical, HDMI ● RS232c control, RC-5 system link, 12V trigger in/out ● Compatible with the following disc formats: CD, SACD, CD-R, 44.1k WAV, AAC, DVD-R/RW, DVD+R/+RW, MP3-CD/DVD, WMA

CONTACT ☎ 020 8971 3909 ● www.krellonline.com

Although best known for its predominantly high-end, high-power amplifiers, Krell is a full-range manufacturer whose remit extends to AV equipment, loudspeakers and disc players of various types and levels of sophistication. In fact, the company produced what to many was the finest CD player of its day – the extraordinary but frighteningly expensive KPS25. Sadly, this player was discontinued when the supply of transport mechanisms dried up.

It was followed by the SACD Standard from the entry-level KAV range, which included multichannel SACD replay in a unit costing about half that of the Evolution 505, the subject of this test. That model was introduced in 2003 and subsequently revised when the original mechanism became unavailable. The 505, Krell's third SACD player, is from the company's no hold's barred Evolution series, and adds more sophisticated in design and construction as befits the higher price. A



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second Evolution model, the 525, will follow soon, adding DVD-Video replay to the feature set (but not DVD-Audio). There will be a price premium, of course, but the two 500 series players will otherwise be identical.

The 505 inside story starts with the use of separate discrete power supplies, built around a 65VA linear transformer for the drive mechanism and a 45VA transformer for the audio circuits, the latter optimised for Class A operation. Both work through with several stages of regulation to give a stiff, rock solid foundation, which has always been Krell's way. Internal signal transmission is entirely balanced and in Class A throughout, free of feedback and the internal architecture operates in current mode, with a whopping great 500kHz bandwidth.

Inter-component connections optionally use the proprietary CAST (Current Audio Signal Transmission) interface as an alternative to single-ended (for stereo or multichannel) or balanced (two channels only) modes. In CAST mode, according to Krell, all linked components in a system operate effectively as a single component. There is only a single current-to-voltage converter stage in the whole

system when used with a Krell CAST-equipped amp, minimising (Krell says eliminating) signal transmission aberrations, and effects due to cable impedance when transmitting signals in the voltage domain.

This is the first Krell SACD player with CAST, though the interface was part of the late-spec KPS25 CD player. Current mirrors operate using LED voltage references, said to result in a two-thirds reduction in harmonic distortion. The player is equipped with PCM1738 differential DACs on each channel, and in-house designed DAC reconstruction filters. Four SACD and two CD anti-aliasing filters are available to 'fine tune' the sound.

So much for the internal nuts and bolts. Externally, the player is scarcely less impressive, with highlights including a fully machined case with no sharp edges or corners (unusual), first-class fit and finish, a very thick, solid front panel extrusion, and a case-within-a-case design. This last includes a high level of decoupling of the mechanism to reduce microphony. This, incidentally, reduces the differences that are usually gained by mass-loading, and it looks nicer than sticking a brick on top of the box. The controls also have an unusually good

operational feel, even by Krell standards, but some may find themselves befuddled by the field of tiny buttons on the right hand side of the fascia, and curse the fully machined remote control that needs to be half dismantled before the batteries can be changed. SACD Text is included in the player, though CD Text is not. As part of its mission to be a complete disc-playing solution, MP3 CD (and, intriguingly, also MP3 DVD discs) can be played.

SOUND QUALITY

To help extract the most from the 505 in two-channel mode, we hooked it up to Krell's own FBI amplifier (reviewed in *HFC* 282) using balanced Nordost Valhalla cables. The FBI was then swapped with a Classé SSP-300 processor and CA5100 five-channel power amplifier for multichannel operation, and in both cases the main loudspeakers (in part because they were available in a multichannel configuration) included a B&W system based on the 8055 standmounts, HTM1D centre speaker and ASW825 subwoofer. Other speakers used included a multichannel system containing five Mordaunt-Short Performance 6 floorstanders and a Performance 9 subwoofer, plus stereo ■

Q&A

Peter McKay, vice president of sales and marketing for Krell Industries, discusses the evolution of the Evolution



Why did you introduce this, your third SACD player, so soon after the previous model?

The Evolution 505 was introduced to complement the new series of Evolution products. It features CAST technology, which the SACD Standard did not have. It also uses a different transport, which has proven to be much more reliable.

Does the inclusion of SACD have any impact on CD performance?

Since an SACD has a data density similar to a DVD, the servo mechanism has to be more precise and the error correcting system more robust. This benefits CD playback as well and, in fact, the 505 accesses CD tracks more quickly and plays scratched discs better than the SACD Standard.

How would you characterise the architecture of the Burr-Brown DACs?

The D/A converter uses what Burr-Brown calls its Advanced Segment topology. This hybrid multi-bit delta-sigma architecture improves low-level linearity and noise. It would be tough to call it a native DSD or PCM DAC.

Can you explain about the mechanism and its control system?

The mechanism works on a DCI (DVD Control Interface) as opposed to an IDE interface. From the end user's point of view, there is no difference between DCI and IDE. As far as sourcing goes, we have assured ourselves a solid supply of drives through an agreement with the manufacturer. Also, since we now have a direct relationship with the manufacturer, which was not possible with Philips, we get much better service and are able to repair drives ourselves or send them back for repair with good results. This relationship has also enabled us to make our own modifications to the drive's control software, which have resulted in a richer and more intuitive user interface.



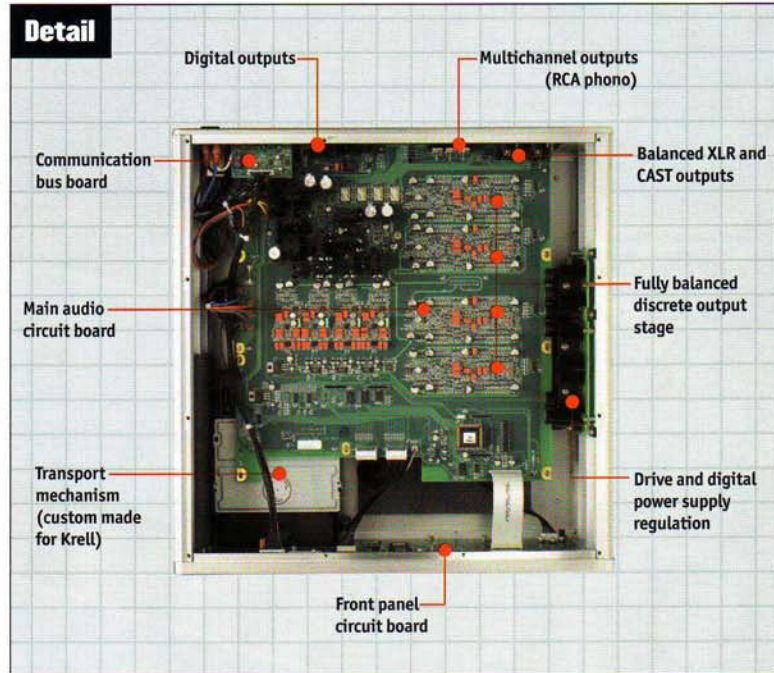
pairs from Opera and Focal. The FBI clearly favoured the speakers that offered the greatest power handling capacity, allowing it to fully spread its wings.

But does the 505 really show other players a clean set of heels? One point to bear in mind is that it needs about a week to burn in before it comes on song, and it goes off the boil alarmingly quickly, as we discovered after a power cut. Under 'cold' conditions, it just doesn't want to communicate – it sounds dull and congested. But when it's warmed up, it could not sound more different. The first disc we played – and it was just a warm-up piece on auto-repeat in a different room – was Eric Bibb's *Good Stuff* (Opus 3 SACD, but in stereo). Played back at a relatively low volume level as I walked around the room, the notes seemed to crystallise out of the air and hang there. The music (try *Don't Ever Let Nobody*

Drag Your Spirit Down) has an exquisite sense of rightness and of timing. I knew, without looking, that there was a musician there behind my back, playing in the room... except, of course, there wasn't!

The same palpable sense of real music being made happened again and again, for example with the Pentatone version of Shostakovich's eighth symphony (Berglund – Russian National Orchestra – multichannel SACD this time), and then with a long-term piano favourite, the Martha Argerich and Mikhail Pletnev disc of Prokofiev and Ravel (DGG, on CD). In a way, the last of these – and we could have named many more – was the most impressive, not because of its sonic excellence, though it is very good, but again for the exquisite sense of timing. The notes were conjured into the air, and each note hung around to be savoured until its tail had died away. It was not just





good sound (though it was certainly that). It was the absolute quintessence of good musical communication. And that's very rare.

One rather obvious question at this point was how to distinguish between CD and SACD, and the lame but unavoidable answer is that a direct comparison is not really possible. The Krell is far too good an SACD player to fall for the common pratfalls. It is not lacking in transient vitality and it doesn't sweeten the music; when the occasion demands, it has a hard-driving, bold and physical sound. But there is no accounting for the provenance of recordings that are available in both CD and SACD form, for example from hybrid dual-layer discs, which are nominally the same in each version. The notes are the same, but there is no getting over the effect of the different processing chains.

There is also the question of the switchable filters. It is hard to compare SACD filters 'one' and 'two' with 'three' and 'four', since the two groups have completely different output gain settings. Although the differences within each group – between filter one and two for example, with CD and SACD alike – are sometimes blindingly obvious, at others times we found them hard to detect. In general terms, we tended to prefer one and two over three and four, and usually – but not always – with CD one over two, as the latter slightly softens the impact. The same preference was found with SACD, though the differences were audibly reduced.

Perhaps the really important point is that in general terms, SACD provides an even better result than CD. It was in stereo SACD mode that the Eric Bibb recording provoked the comments referred to above, and this was far from being the only SACD to trigger reactions

“I knew, without looking, that there was a musician there behind my back, playing in the room... except, of course, there wasn't!”

of this kind. Exceptional CDs could also provoke that tangible, uncanny sense of musicians in the room, but the effect was statistically more likely with SACD.

Why would you buy this player, if (at nearly nine grand, a big 'if') you were in a position to do so? One reason is its state of the art SACD replay. However, commercially at least, SACD's star does appear to be on the wane. But SACD is neither technically nor sonically deficient. The format has already seen off DVD-Audio, there are plenty of discs available, at least in certain key categories (classical, jazz, acoustic) and SACD won't be redundant until HD DVD and/or Blu-ray provide a truly wide-bandwidth home for high-resolution audio. Given the relative lack of success for DVD-A and SACD, that day may never come. SACD's travails are the worst news for high fidelity, and more importantly for reproduced music itself. But as it stands right now, a good reason in favour of the Evolution 505 is that it is a late (perhaps final) chance to procure one of the finest of all multichannel, high-resolution disc players.

Its CD-playing pedigree is at least equally compelling. The KPS25 has not been available for some years, and it was not possible to compare to two. Nevertheless, it seems that the 505 trades points with that legendary old model. The Evolution 505 has most of the architectural solidity of its distant predecessor, but with a new sophistication, sheen and polish, plus greater resolution. And if you object that

the price is simply too high to make any kind of sense, well maybe, but you pay for exclusivity – and as long as any product can show cheaper models a clean set of heels, then it has a place. This one does, and therefore it has.

If you are keen to seek out the very best in CD and SACD replay, the 505 should appear at the top of your short list. **HFC**

Alvin Gold



VERDICT	
SOUND >>> 96% <small>>>> SUB RATINGS CD 95% SACD 97%</small>	PRO A true heavyweight in every sense, which addresses all the musical issues in a rigorous way. Superb build quality and finish represent the icing on a world-beating cake.
FEATURES >>> 90% 	CON No hi-res digital output; balanced/CAST outputs only from the two main channels; could use an extra display dim setting. And it's expensive!
BUILD >>> 95% 	
VALUE >>> 85% 	
CONCLUSION Tour de force of disc playing technology with exquisite musical discrimination – for example, as we discovered on test, between different recordings of Steinway pianos. CD and SACD replay are of essentially similar calibre.	
HI-FI CHOICE OVERALL SCORE >>> 91%	