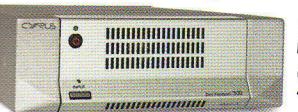


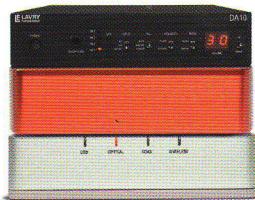
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# Eastern promise

Krell's expanding eastern-made, entry-level range heralds a new era of affordability for the high-end marque. **Alvin Gold** looks in

**U**ntil now, Krell not only epitomises the American high end, the company practically invented it: the brand is quintessentially macho, solid, muscular and aspirational, as well as being reassuringly expensive with build quality that often seems utterly, and gloriously over the top. The very idea of a budget Krell range is a kind of oxymoron, but even Krell is not immune to what's happening in the

wider world. If ever the time was ripe for an affordable range of Krell products, the current global economic slowdown has provided the perfect opportunity.

## The real thing

Tested here is the entry-level S-350a, which is a CD-only player. The closely related S-350av adds DVD playback (upscaled to 1080p) and the claim is that it does so without

### ► DETAILS

**PRODUCT:** Krell S-350a  
**Origin:** SA/China  
**Type:** Compact disc player  
**Weight:** 11.4kg  
**Dimensions:** (WxHxD)  
438x104x450mm  
**Key Features:**

- Compatible with CD-DA, CD-ROM, MP3-CD
- Modular design, internally upgradable for DVD replay
- TEAC-Esoteric slot-loading mechanism
- 24bit/192kHz differential mode
- D/A converter for each channel
- 12V trigger I/O

**Distributor:** Absolute Sounds  
**Phone:** 020 8971 3909  
**WEBSITE:** [krellonline.com](http://krellonline.com)

compromise to CD playback performance. We discovered it performs as we describe below, as a CD player that is already built around a DVD mechanism. Put a DVD in the player and see for yourself.

As a CD player, the S-350a is straightforward. It has all the usual search and repeat modes, a neat and very simple backlit LCD display and you can extract the analogue audio signal in single-ended or balanced forms, using XLR sockets on the back. But the player will deliver electrical digital outputs in (optical) TOSLINK or (electrical) S/PDIF form and it will also accept external digital signals, again both optical and electrical. It will even accept high-resolution signals – up to 96kHz anyway, which is the limit for the connector types used.

The player is also equipped with 12V trigger in and outputs and an RC-5 input, which can be used to integrate the player with system controllers from AMX, Crestron and the like. It's also equipped with an



RS-232 socket for external comms, but there is no HDMI output and the AV version of the S-350 is limited to composite and S-video, which will hamstring the player as a high-performance video source component.

Internally, the S-350a is well specified, with a massive power supply section and solid build quality. It is also compatible with CD-DA, CD-R/RW and MP3 CD media. Having being made outside of the USA was not used as an excuse for second-rate construction.

Unlike previous generation Krell products, dating from their introduction in the early '80s, the S-350a is made in China, though the design comes as usual from the Krell R&D labs at Krell HQ in Connecticut.

The player takes advantage of hardware developments that were originally introduced to service the computer market. The most obvious of these is the player's slot-loading mechanism, which is becoming increasingly common instead of the more traditional loading drawer.

**"No one could ever reasonably claim that the player is anything less than immaculately built and presented."**

We first saw samples of Chinese-made Krell components two or (perhaps) three years ago at CES – the world's largest consumer electronics shindig in Las Vegas – where we found Dan Agostino (co-founder and then CEO of Krell), with some prototypes, exuding a child-like enthusiasm about the fact that he was able to send the Chinese factory a set of drawings and circuit diagrams and within a few months receive back, as if by magic, a fully sorted and working product.

As far as we know, the products he had at the time never appeared on the market. They were tryouts. But he was clearly impressed with what was possible and the importer

sent us an sample of the matching S-300 amplifier to try out with the review player, which provided the perfect opportunity to see how they would interact.

#### Krell's bells

The S-350a is shockingly heavy – the only way to explain the 11.4kg deadweight in a CD player is the inclusion of a typically Krell scale power supply with a massive toroidal transformer of a capacity more appropriate to an amplifier than a CD player – though unusually robust external metalwork is also part of the equation. No one could reasonably claim that the player is anything less than immaculately built and presented.

As usual with Krell, the S-350a has a plethora of small control buttons, far too many to take in at a single glance, which for many will make operation using the supplied remote control more natural. But in its favour, the native control set is positive and gives good tactile



**THE KRELL** won't play SACD, despite using a D/A converter chip, which is itself DSD-compatible. Almost all of the Burr-Brown Advanced Segment DACs, accept both PCM and DSD data. For the few that come in PCM-only formats as well as PCM/DSD, there is no difference in performance.

Followers of Krell will know that the company has suffered from the unreliability and poor availability of some of the earlier SACD mechanisms it used and so it has now decided to pull the plug on the format with all new and forthcoming disc players.

## Q&A...

WE SPOKE WITH BILL MCKIEGAN, PRESIDENT OF KRELL INDUSTRIES



**HFC: Why use a slot-loading mechanism? Did the use of such a mechanism cause any design problems or issues?**

**BM:** Internally, a disc is handled the same way whether it is brought into the unit via a tray or a slot. The benefits of the slot-loading mechanism we are using is that the buffer is employed after the data is read from the disc. Instead of the data being used from the disc directly, it is sent to a buffer. This 7.5-sec buffer provides a safe haven for the data, isolating it from drive-reading errors and any externally caused vibrational errors that might corrupt the data. In conjunction with our proprietary jitter-reduction module, we present the most precise signal to the digital circuitry. This is the same system that is used in our flagship Evolution 525a CD player.

**Are there any restrictions, for example, in the use of non-standard disc sizes or shapes?**

There are no restrictions, the S-350a can play 12cm and 8cm discs.

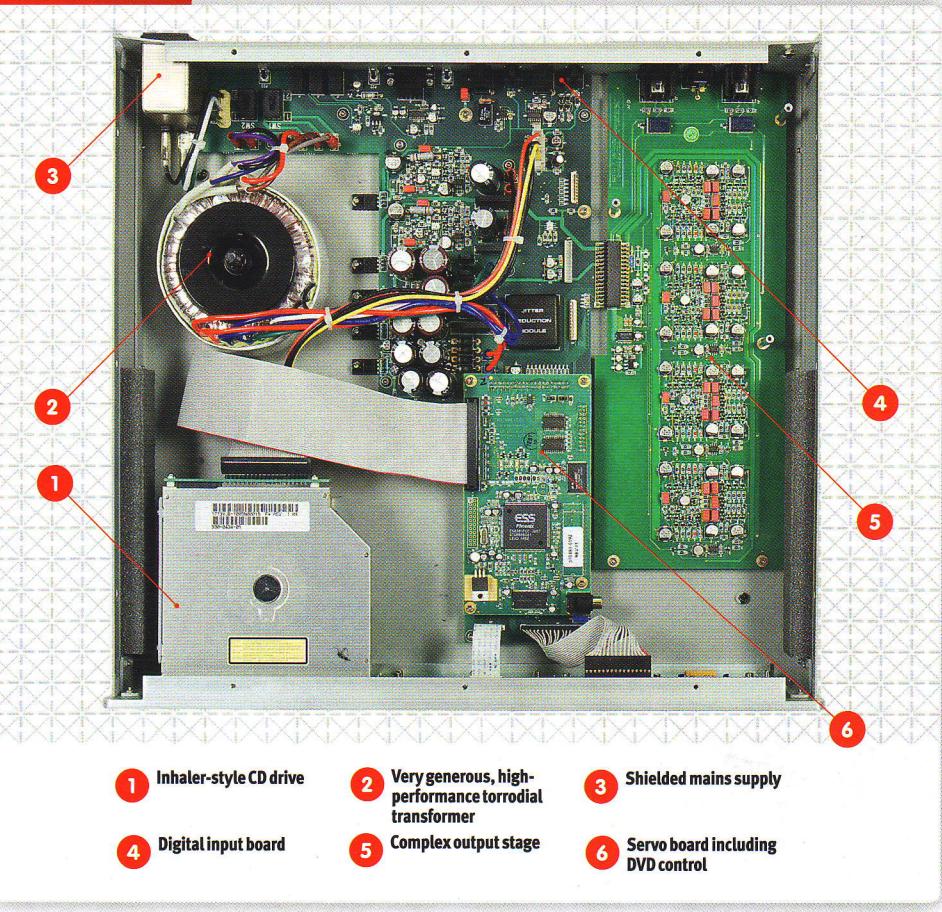
**Can you describe the power supply topology? – this seems to be where a lot of work and expense has gone**

The power supply is classic Krell in that it appears to be overkill for a source unit. In reality, it is what is necessary to deliver top-end performance. Technology-wise, it is a linear design with a discrete cascode error amplifier for the analogue audio stage regulators. This provides extremely tight voltage-regulation. The high-current regulators are a low-dropout voltage design and use Schottky rectifiers in the input supply for higher efficiency and lower heat dissipation than typical linear supplies.

**There's no headphone socket or CD-Text facility. Why is that?**

We didn't feel we could do justice to headphone-listening by simply adding a headphone jack. We would rather leave a feature off than to do it poorly. In the case of CD-Text, it is simply not supported by the decoder we are using.

## HIDDEN TECH



1 Inhaler-style CD drive

2 Very generous, high-performance toroidal transformer

3 Shielded mains supply

4 Digital input board

5 Complex output stage

6 Servo board including DVD control

feedback through the fingertips.

The dimmable backlit LCD display is clear and uncomplicated, though it tends to switch to the negative when viewed from oblique angles. The player handles discs quietly and without so much as a hint of temperament, in fact, the only features we missed and would have liked to have seen were a headphone socket and, perhaps, CD Text (see interview with Krell's Bill McKiegan, left).

Taking all the pluses and minuses into account, including sound quality which is discussed separately, this player represents exceptional value. It is not just the most affordable way of joining the exclusive Krell owners' club, this is a player that delivers, well beyond what might have been expected.

### Even and articulate

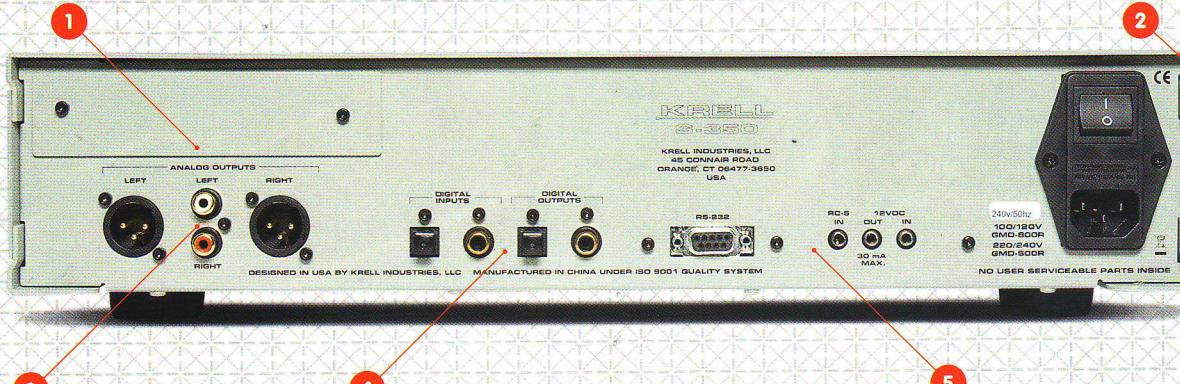
The S-350a was supplied for test with a sample of the matching S-300 integrated amplifier and the prognosis is unequivocal; they work brilliantly, separately and together.

Both units – the CD player and the matching amplifier – achieve a very high standard, much higher, in fact, than we had anticipated. There are some obvious mechanical

elements of the performance available from this player (and indeed the matching S-300 amplifier) that come across clearly at an early stage. The midband, for example, is very smooth, even and articulate, and essentially free of the flatness and lack of perspectives endemic with many lesser players, as well as some of Krell's early disc-playing hardware.

By the same token, the treble sounds well integrated and highly detailed and the bass is more full-bodied than many earlier generations of Krell players. Discs are handled efficiently, with rapid track access and virtually no sound from the internal mechanism, or the spinning discs themselves. The additive result of these factors is that the Krell is easier to listen to for extended periods and is more believable, too.

Overall it does a fine job of CD replay and it extracts a commitment and passion that is unusual from compact disc. Imagery is handled in an unusually three-dimensional way. Image depths are fully painted-in and the players bass is particularly deep and potent, too.

**CONNECTIONS****1** Expansion port for video-equipped model**2** Separate top panel, side panels and bottom plate for rigid construction**3** Choice of unbalanced and balanced outputs**4** Digital inputs and outputs**5** Third-party control connections for integration

We were particularly impressed by the way it handled such material as Mary Coughlan's *Moon Over Bourbon Street*, which came across with such obvious depth and such exquisite world-weariness, it was almost too much to bear. The top end is clean, with a convincing sense of air and space, which was shown clearly with a range of recordings, including the exquisite purity of Christianne Stotijn's mezzo in Brahms' *Alto Rhapsody* and Mahler's *Rickert-Lieder* from an Onyx album originally given away as a freebie magazine cover-mount.

This album usually reproduces well. The difference here is that the Krell made the best of what was clearly a well-conceived recording and performance, by adding a sense of air and presence that other replay systems often fail to resolve. This is the difference between plain good sound quality and a performance (with the emphasis on that word) that causes the hairs to rise on the back of the neck.

This album also demonstrated another element of the Krell: it's ability to create a very precisely delineated stereo soundstage, with properly fleshed-out depth and a beautifully articulated sense of scale and spaciousness. But this is certainly not limited to this one recording, or even a select group of them. There was a similar quality in musically unrelated material, one example from many being the album *Raising Sand* from the improbable combination of Alison Krauss and Robert Plant.

It was even more apparent, or at least more dramatically so, with some more obviously heavy-duty material, including a Signum Classics live recording (in London's Royal Festival Hall) of Schoenberg's massive oratorio *Guerre-Lieder*. The player's ability to bring off testing recordings like this without sounding excessively dense or congested, yet without loss of weight or impact, marks the S-350a out as special. By comparison, many other broadly comparable

players tend to sound flat and are difficult to become involved in, but lack of involvement was not a factor with the Krell.



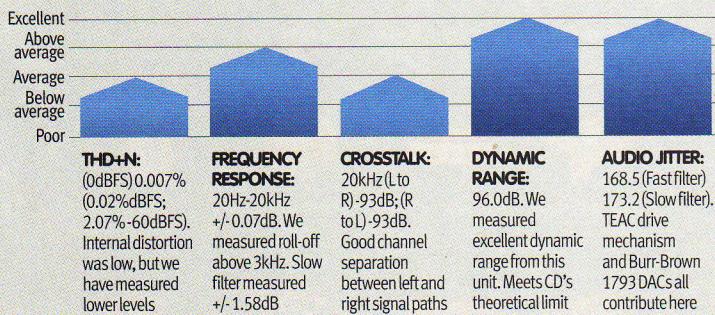
**THE S-350A** player is easy to build systems around. It is clearly well-matched with the S-300 integrated amplifier, and not just because they are an aesthetic match, but also because they speak in a similar voice: with boldness, and conviction and because they are capable of resolving the architecture of the material they play.

The matching amplifier seems very close to true high-end audiophile standards and is a perfect partner.

**Straightforward and practical** The S-350a speaks for itself. This is a straightforward, practical player that supports balanced audio and is well-enough endowed to drive compact disc a long way towards the limits of the format.

The DVD version of the player (which costs considerably more) is less convincing. Yes, the ability to upgrade the player to full DVD status is a neat trick, but it won't handle Blu-ray discs and it won't talk down an HDMI pipe, which ultimately makes this version of the player of limited value.

The minor criticisms described elsewhere in this article – no headphone socket and no CD Text – are far outweighed by what it does and does well as a dedicated audio player. It looks as if the switch from West to East with this range has done little to upset the Krell reputation. ●

**TECH LABS****RESULTS AT A GLANCE****Hi-Fi Choice****OUR VERDICT****SOUND QUALITY**

**LIKE:** Well specified player with straightforward control system and readable display

**VALUE FOR MONEY**

**DISLIKE:** No headphone socket; no CD-Text

**BUILD QUALITY**

**WE SAY:** Accomplished CD player with real breeding underpinning its excellent performance

**FEATURES****OVERALL**