



Stream lover

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Issue No. **384**

May 2014

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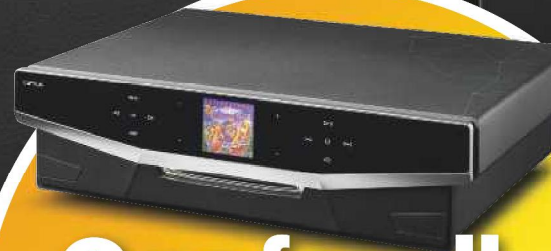
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Last of the Mohicans

Could we really be facing the final days of CD? If so, this could be the player to save the day reckons **Jason Kennedy**

Now that the CD format appears to be in the twilight of its life Rega has produced one of the most entertaining and enjoyable players I have ever encountered. It's ironic really that when vinyl was being written off in the eighties folk in the audio business carried on improving and refining turntables and now they are significantly better than they were in the format's heyday.

It looks like something similar is starting to take place with CD. Disc sales are being trampled under the weight of downloads, yet in the last

year I encountered the best CD transport ever created in the MSB Data CD IV and now Rega has delivered all the best bits of its phenomenal Isis player in a machine that'll set you back £1,600. Helping to soften the blow of that price tag is the fact that it's also a fully fledged DAC.

The Saturn-R is a minimalist-looking player from most angles, it doesn't even have any buttons for its DAC section visible on the front panel, yet it has all the key flavours of digital input including USB. But that's not all because there are digital outputs too, two sets of them, one

DETAILS

PRODUCT
Rega Saturn-R

ORIGIN
UK

TYPE
CD player/DAC

WEIGHT
5kg

DIMENSIONS
(WxHxD)
432 x 82 x 325mm

FEATURES
● Digital inputs: 2x optical, 2x coaxial, Asynchronous USB
● Digital outputs: 2x coaxial
● Outputs: single ended RCA phono
● Supported sample rates: 44.1kHz, 48kHz, 88.2kHz, 96kHz, 192kHz

DISTRIBUTOR
Rega Ltd

TELEPHONE
01702 333071

WEBSITE
rega.co.uk

direct from the transport mechanism and the other from the DAC. Which is a first in my book. And lest you think that Rega has taken the guts of an Apollo-R and the salient parts from its DAC and stuffed them in one box, there is at least one key indicator that this is not the case. The USB input is a proper asynchronous type that can accept up to 24-bit/192kHz signals, full HD digital audio in other words. Which means Windows users will need to download a driver for the XMOS USB chip, but that's usually the case if you want to get best results. The USB input also has three LEDs surrounding it to indicate status, another first that might be of use in setup perhaps.

As previously mentioned, there are no DAC selection switches on the front panel, so you will need the Solaris remote – a properly festooned device that fooled me for a while with a button marked USB. That does not select said input, but relates to another product entirely. Eventually I discovered the input select buttons, which when brought into effect by the CD/DAC can scroll through all of the inputs.

Rega's electronics are rarely the most sexy at their pricepoint and the same could be said for the Saturn-R.



It's solidly built and inspires confidence in its longevity, but the paint finish just isn't that slick. The plastic nature of the drive cover is not entirely inspiring either, but having a fixed-disc transport is a good thing for reliability. Drawer mechanisms are prone to problems in the long term and introduce lightweight bits of plastic into the player, which must be prone to vibration. This drive also avoids the inconvenience of a puck by clamping discs with a spring-loaded mechanism. Look inside and one

It might be a minimalist-looking player, but it's how it sounds that really counts

thing leaps out at you, the words "A Valvepower Prime Layout", this has the hallmarks of Rega's electronics whizz Terry Bateman, a tube aficionado and presumed owner of some Porky Prime Cut vinyl – the signature of George 'Porky' Peckham who mastered classics including *Led Zeppelin IV*, *Foxtrot*, *Made in Japan...*

If you look a bit closer you might be able to spot two Wolfson WM8742 digital-to-analogue converter chips that form the heart of this machine. It's these that deals with digital signals from the transport and external devices and this is where the indications of sample rate on the display originate from. It's a little vague on that front, referring to 88 – 96kHz rather than one or the other as some DACs do. It's more definite about which digital input is selected though, although you have to be pretty close to be able to read the number. The chosen filter is, however, very clear. What's less clear is why you can select one of five filters for digital inputs, but not the CD player as both use the same converter chip.

Sound quality

I start warming the Saturn-R up in the other room and even at low level it becomes pretty apparent that it has a rhythmic integrity that is so far ahead of the norm it's uncanny. To be honest, there are very few CD players that can do pace, rhythm and timing well, but this is a member of that select club. Sitting in front of it, this is all the more obvious. Equally clear is the slightly forward nature of its presentation. If you are looking for tonal sweetness it may not be for you, if you want to get involved in the music. If, however, you want to feel like the performance is taking place right in front of you, then it is.

I find myself wondering just how Rega manages to do it, to make a

CD player that lets you hear all the important things in the music, the tempo, the timbre and the phrasing of instruments and voices. The relationship between the various elements within the orchestra or band – you can follow individuals or the whole with equal ease. The one thing that you don't notice is the sound quality, that might seem odd because it tends to be what most people think hi-fi is all about. But when you consider it, you realise that hi-fi is a tool to assist in the appreciation of music, a better way of accessing the message rather than its 'appearance'. Sound is a shallow thing, quite often a very nice thing, but not the reason

It literally refreshes the parts that other CD players don't even know exist

why we love music. It's the heart of the music that this CD player gets too so well, it does reveal tone and imaging, but these are secondary to interplay, musicianship and composition. The various layers in a mix become apparent and the energy and feeling even more so, it literally refreshes the parts that other CD players don't even know exist and in an extremely coherent fashion.

Rega's Apollo-R does a similar thing but is a little cruder, while the Saturn-R is more revealing and subtle, live recordings are made obviously live and menacing pieces such as Massive Attack's *Inertia Creeps* become even darker. What I love most of all about the Saturn-R is the way it revives your music collection, I've bought a lot of albums that fail to retain their appeal but this machine reveals what's good about them, what's interesting and – critically

CONNECTIONS



- 1 USB input for debugging
- 2 Optical digital output for DAC
- 3 Coaxial digital output for DAC
- 4 Optical digital output for CD
- 5 Coaxial digital inputs
- 6 Optical digital inputs

Q&A

Terry Bateman
Rega engineer



JK: How do you manage to extract so much music from a CD?

TB: A lot of it is do with the spinner circuit we unearthed many years ago. The servo, the decoding, the error correction the way the data is handled. It was developed by Global Silicon for the portable market and they tried to make it bombproof. They tried to get the best data and the most data off the disc and they built a particularly good circuit. Couple that with the Wolfson DACs and good old engineering like good power supplies, coupling capacitors, bypassing electrolytic with polyester caps etc.

Does it share any elements with the Isis player?

When we developed the Isis we improved the power supply in and around the player, we used some of that in the later Apollo (Apollo-R) and now the Saturn-R. It's got a bit of Isis in the power supply and we took it a little further than the Apollo-R. We got a larger transformer and improved the PSU to the audio stages, which makes the difference between the two. When we built the Apollo-R we kept some of the improvements back for the Saturn-R. Over and above the Apollo-R you've also got a high stability master clock. Saturn-R is the accumulation of improvements made for the Apollo-R and the Isis. It's also a different DAC, two Wolfson chips in parallel. We're squeezing as much out of them as we can.

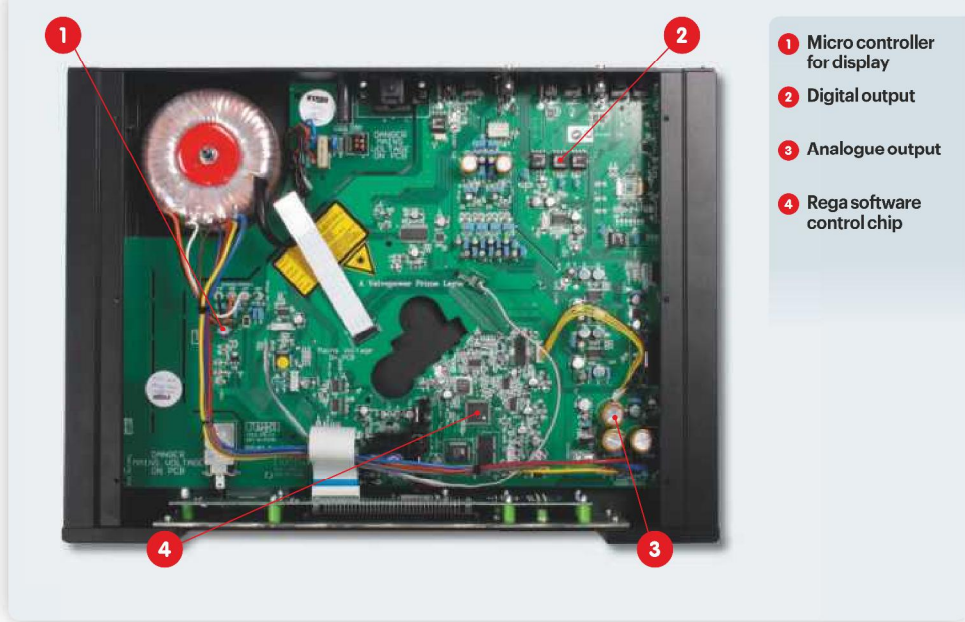
Why have you included LEDs around the USB socket?

It's for fault finding, debugging. We use the XMOS USB receiver that has the three LEDs that tell you what it's doing so we used them. It makes it much easier to help customers having trouble with computer audio.

Why isn't there a DAC selection button on the front panel?

Roy's got this very minimalist approach, if you look at the Rega turntables and compare them with what they first competed with, you can see where the approach comes from. Ultimately the design fits with Rega so we went with it.

IN SIGHT



- 1 Micro controller for display
- 2 Digital output
- 3 Analogue output
- 4 Rega software control chip

– why it is that they you purchased them in the first place.

And, of course, it's a fully fledged DAC. Once I figure how to select USB, I discover that file playing delivers a more refined result than the disc and nearly as an engaging one. The timing remains strong and is superior to a number of pretty decent standalone DACs. If you want a rich and relaxed sound just hook up a laptop running JRiver and you will get as much out of the converter, you will also find yourself having a lot of fun.

Jeff Beck and Joss Stone's rendering of *I Put A Spell On You* has plenty of rhythmic solidity and you really appreciate Beck's fabulous playing, more perhaps than Stone's voice, but that could be a matter of taste. I try a number of tweaks with the Saturn-R to see how much more it can do, the most effective is a PS Audio P5 mains regenerator. This gives the player considerably more refinement by cleaning up the sound and letting it deliver a lot more hi-fi virtues. It doesn't enhance its ability to engage and enthrall, but does give the sound more depth and tonal richness, and these are nice things to have.

Conclusion

If you are into hi-fi in order to get greater enjoyment out of your music collection, there are few CD spinners that will do a better job than this Rega. If on the other hand you are a dedicated audiophile, the lack of finesse and holographic imaging may not be to your taste. But ultimately hi-fi should be a conduit to the glory of music and in this respect the

Saturn-R is in another league to the majority of the competition.

It's not such a shiny piece of male jewellery and the remote is initially baffling, the red display can also be hard to read in bright light. This aside I can think of no reason why every music lover in the land does not need to own this CD player. With the

It has a rhythmic integrity that is so far ahead of the norm it's uncanny

comprehensively equipped DAC it can also do wonders for your downloads and hi-res files.

With sales on the decline there may not be that many more great CD players produced, I recommend you get one of these while you can. You really don't know just how good the format is without it ●



HOW IT COMPARES

As a CD player the Saturn-R will give the best at the price a very strong run for their money. In many ways its most obvious competitor is the Naim CD5 XS (£1,995), this is unlikely to match its timing skills, but it's a close call. The Naim wins on residual value, but loses on features because it doesn't have DAC inputs.

The Roksan Caspian M2 (£1,800) will give you more refinement and looks better, but can't compete on the musical engagement front. DAC wise you'd have to go to the Naim DAC-V1 (£1,250) to give it serious competition, but that does have a volume control.

Hi-Fi Choice

OUR VERDICT

SOUND QUALITY



LIKE: The most enjoyable and musically engaging CD player you can afford.

VALUE FOR MONEY



DISLIKE: Finish is not as slick as some

BUILD QUALITY



WE SAY: If you like music you will love the Saturn-R. It reaches the parts that few digital components can

FEATURES



OVERALL

