

Out Of This World

Rega has revised and repackaged its Saturn CD player/DAC. Now in Mk3 guise, can this quirky top-loader win Chris Frankland over?



While it is common for CD players to offer a digital output, it is not so usual to provide separate inputs to the DAC to decode other digital devices, such as streamers and computers. The Mk3 iteration of Rega's Saturn, originally launched in 2013, is therefore, more of a CD transport and DAC in one box.

It has been rehoused in a new case to match the updated styling of the rest of the amplifier range, such as the Aethos and the forthcoming new Elicit Mk5 integrated amplifier. And the striking styling of this top-loader

with its lift-up cover on the CD mechanism would not look out of place on a Klingon war bird!

Its metal case though is sturdy, well made and the player is a weighty 9.5kg, with build quality to the high standards we have come over the years to expect from this well-respected British manufacturer.

While Rega tells me much of the Mk3 is unchanged from the previous version, the Mk3 Saturn does feature an improved USB DAC input, an enhanced output amplifier circuit, enhanced digital power supplies and redeveloped analogue and digital outputs. The DAC uses dual Wolfson WM8472

chips and benefits from the same galvanic isolation as used in Rega's DAC-R.

The USB input of the DAC has been improved with asynchronous operation at sample rates of 44.1kHz to 192kHz, while dedicated drivers for Windows computers are said to eliminate degradation caused by Windows native drivers. A driver is not needed for MacOS.

The CD player section has its own high-capacity power supply, which was a result of the R&D on the company's reference CD player, along with an improved micro-controller and display drivers. It also features a





This top loader uses Wolfson WM8472 digital converter (DAC) chips and is driven by a linear power supply fed by a toroidal transformer (left rear).

high-stability master clock, high-performance PLL digital interface receiver, isolated digital inputs, while the signal path of the CD player in CD mode is kept to a minimum.

The Saturn Mk3 rear panel has digital inputs via USB, two optical and two coax. There are also digital CD outputs via coax and optical. One analogue output is provided and that works for both the CD player and the DAC.

Anyone familiar with the Aethos will recognise the styling of the Saturn Mk3's front panel, where to the right of the display are push buttons for play, stop and skip. More comprehensive functionality is provided on the remote control where on the CD player you can select shuffle and

repeat and also create an 'album' of up to 99 tracks from a disc. The remote also allows you to switch the between CD and DAC mode, with the further option to select the DAC input and filter settings. Five filters are provided, but Rega suggests using Filter 1, which is 'linear phase half-band'. I briefly listened to the other four, but to be honest, cannot say I heard much difference. Experiment if you feel so inclined.

SOUND QUALITY

For my listening tests, the Saturn Mk3 was hooked up to an Audio Note Cobra integrated amplifier and Russell K Red I20SE speakers.

Being a top-loader, if you are going to use it in a rack, you need to allow room for the CD flap to

open and for you to have enough room to load and retrieve a CD. Apart from that, all other functions are easily accessible from the comprehensive remote control.

While on the subject of loading and retrieving discs, here I must voice the only real gripe I have about the Saturn Mk3. Loading the CD is easy, but I did find retrieving the CD a bit more awkward. There is a finger cutout to enable users to pop the disc out, but I found it a bit fiddly. The flap itself though is well made and has a lovely slow-motion closing action. Just nudge it on its way and it will close by itself.

I started my listening with the great Groovin' CD from one of my favourite guitarists, Peter White. On his cover of the Johnny Nash classic, I Can See Clearly Now, the Rega immediately struck me with its bite and subtlety on White's guitar, conveying well just how each note was played. Drums and percussion were also crisp and articulate, while the synth backing was nicely detailed and separate. The rhythmic lilt of the track with its gorgeous bass line was also



As well as the usual play and search/skip controls, the remote also gives the user access to the DAC filters and DAC input selection



The transport holds a CD in place on the spindle-hub with three spring-loaded clips. Also seen here is the sled holding the upward firing laser that moves from centre outward.



The rear panel has the usual CD unbalanced analogue outputs (RCA phono sockets) as well as coax, optical and USB digital inputs for the DAC.

beautifully handled and all in all the track moved and grooved as it ought to.

Some vocals next and who better than one of my favourite jazzers, Ben Sidran. On Sunny Side of the Street from his Enivr  d'Amour CD, the Mk3 captured the emotion and expressiveness of his vocals well, while the DX7 synth had lots of sparkle and presence and the bass line moved fluidly. Finally, on Honey Dipped from sax player Dave Koz's Saxophonic, the Rega impressed with the impetus, drive and dynamics it conveyed on this track, voicing his sax very nicely and handling the rhythm of the track well. Percussion was snappy and detailed and it all just hung together.

Using the built-in DAC with a

Project Stream Box S2 Ultra streamer, the Saturn Mk3 put in a strong performance compared with similarly price contenders. Its sound was full-bodied, dynamic and detailed and more than held its own against some standalone rivals.

CONCLUSION

The Saturn Mk3 put in a great performance for the price. It was detailed, well balanced, dynamic and tuneful with no harshness or unpleasant edges. At

the price, it ranks among the best,



The top flap has a lovely slow-close mechanism but removing discs was fiddly.

and you get a fully functional DAC into the bargain.

MEASURED PERFORMANCE

Frequency response of the Saturn MK3 measured flat from 4Hz to 48kHz our analysis shows, with a 192kHz sample rate signal and widest Filter 3 selected. The other four filters narrowed bandwidth slightly and will provide better impulse response, but audible differences will be slight.

Surprisingly, the five filter options made almost no difference at 44.1kHz sample rate (CD), where it is common to provide at least one filter that rolls down level above 10kHz, for a softer sound from CD.

Distortion measured 0.05% with 24bit at -60dB, around 0.03% being common nowadays. There were no distortion harmonics as such from the Wolfson convertor, just some noise from the output amplifiers I'd guess, resulting in a mediocre EIAJ Dynamic Range value of 109dB, where 117dB or more is common nowadays.

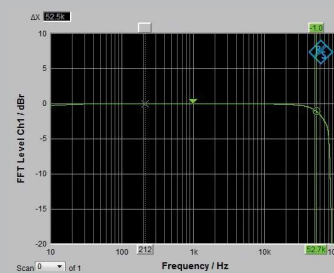
With CD, distortion measured 0.22%, but this is caused by 16bit quantisation noise, not the player. No CD player manages better than this due to 16bit's limitation.

Output measured a standard 2.2V from the phono sockets and was not variable. There is no balanced XLR output nor headphone jack.

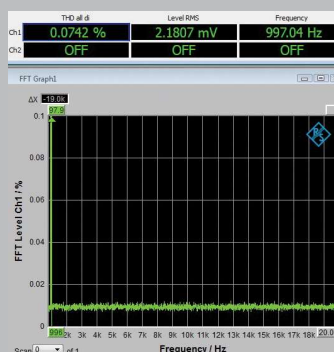
The crucial dynamic range figure was mediocre, due mainly to some noise – likely in the output amplifiers. The filters had little impact too. A satisfactory but not especially competitive set of figures when it comes to hi-res inputs. NK

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|---------------------|------------|
| Frequency response | 4Hz- 53kHz |
| Distortion (-60dB) | 0.07% |
| Separation | 96dB |
| Dynamic range | 109dB |
| Noise | -106dB |
| Output | 2.2V |

FREQUENCY RESPONSE



DISTORTION



REGA SATURN
MK3 £2,000



OUTSTANDING - amongst the best.

VALUE - keenly priced.

VERDICT

CD and DAC had a great sound – detailed and tuneful. Impressive at the price.

FOR

- Dynamic, detailed and articulate sound
- DAC can be used separately - well made

AGAINST

- CD fiddly to retrieve

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