

## Moon 680D DAC/Streamer

by: Jason Kennedy



Simaudio's software engineers had a busy lockdown if the recent announcement of Spotify Connect integration is anything to go by. Unlike streaming services that will be familiar to the sonically aware such as Qobuz and Tidal which can be integrated into an audio company's control app Spotify Connect works rather differently. In fact it works in the same way that Spotify always has, from a standalone app but now the Spotify app controls the data that is sent to a Moon Mind2 streaming engine. With the prospect of Spotify offering lossless streaming to "Premium subscribers in select markets" this provider's huge library could well shake up the streaming market for we connoisseurs. Whether the quality will be up with the established providers and how much of their catalogue will be available losslessly remains to be seen but it's an encouraging move even if Billie Eilish doesn't appear to get it. At present there is no option to integrate Amazon's HD service into the 680D or any other audiophile streamer to our knowledge, currently the only solution is to use Apple Airplay 2. This has also been incorporated into the Moon streamers and allows almost any app based music service to be streamed from the device (tablet, smart phone) to a Moon Mind at up to CD's 16/44.1 resolution.

The Moon 680D is the penultimate streamer/DAC in the range, it's a substantial and fully featured unit with a genuine plethora of sockets on the back panel but mercifully few buttons on the front. A chunky handset provides a wider range of controls including the all important play/pause option, there are full system controls on the handset including volume control but that doesn't apply here where only transport controls and a few other options are available. There are no fewer than nine digital inputs including wi-fi and Bluetooth aptX™, two coaxial and two optical inputs, USB and ethernet. Outputs are in the usual balanced XLR and unbalanced RCA phono varieties. Alongside these are various trigger and link sockets for integration into a multiroom set up or merely to ease the use of a full Moon system, the

most interesting extras are a pair of XLRs for a power supply upgrade where a Moon 820S can be used to upgrade the unit. This is a full size power supply with a price that nearly matches the 680D, it has separate analogue and digital outputs to go with the twin inputs.



The Moon control app allows input selection on the 680D but its primary function is to control the Mind2 streamer, it's interface will be familiar to anyone who has used a Linn or similar app with artist, album and track selection on the right and a playlist with album artwork on the left. It displays format and sample rate (with lossless formats) and there is the option to remove the artwork if you want to see more of the playlist. The latter can be edited, cleared or saved and when you pull up a new album there is the option to 'play all' or 'queue all', the latter putting the tracks at the top of the playlist while the former gives you a choice about where to put them. Alternatively you can pick one track and play or queue it, it's fairly intuitive once you realise that it's necessary to press play after you've chosen the track. Alternatively the 680D is Roon ready and you can control it with that particularly impressive bit of software, for a price.

I was impressed by the speed at which the streaming element of this product gets a track up and running, it's notably quicker than what I'm used to, and the ability to drag a playlist up and down in order to find a track is handy. The playlist doesn't move so that the current track is at the top of the list but you can see what it is by double tapping the 'play queue' header. The transport controls are at the bottom of the page so always easy to access.

In terms of what's under the hood Simaudio describe the 680D as offering 95% of what you get with a 780D v2 at about 70% of the price, but high end audio is renowned for its diminishing returns. The physical differences are a single DAC chip rather than two, and a femto clock rather than a pico one. It's good for 32/384 PCM and DSD256 and offers full MQA decoding on all inputs, although it's unlikely that you are going to be getting an MQA signal from anywhere but Tidal on the Mind2 streamer.

### Sound quality

It took me a while to get a handle on the sound of the 680D because it doesn't have much in the way of character save perhaps a slight smoothing of leading edges, there is a warmth to the delivery that makes it forgiving of lesser recordings and contributes to a strong sense of musical flow. There is a tendency with many DACs to dig so deep into the detail that you get more of an analysis than a performance, the best examples can give both the minutiae and the overall picture but plenty get hung up on audiophile niceties that can get in the way of the music. I like how easy it is to swap libraries, you can't combine them in the way that Roon does but that's one reason for the Roon option.

It does all the hi-fi stuff and well, scale is delivered when it's in the mix, this much was amply demonstrated with Patricia Barber's Touch of Trash which was full size and 3D in its presence and

realism. The bass power of the recording comes through well and the trumpet solo is delivered without any digital glare, something that many DACs struggle with. It's tonally a little more generous than average, you'd never imagine that there were tubes in the output stage but it leans in that direction and this perhaps is why voices are so well defined.



I wasn't getting quite as much zip as hoped so switched libraries from a Melco N1A that works with my usual streamer to an Innuos Zenith SE that has a bit more get up and go. This seemed to gel really nicely with the Moon, improving timing notably and further enhancing the 680D's ability to reproduce expression in both voices and playing. The result is a rounder, fuller version of events that inspired me to play an older album by Yo Miles! called Upriver which is a tribute to electric era Miles Davis and starts with Go Ahead John in powerful fashion with trumpeter Wadada Leo Smith throwing it down and the Moon letting it through without emphasising the brightness of his instrument. When Henry Kaiser lets rip on the electric guitar it's up there with the most blistering on record but the 680D takes it all in its stride, letting the energy flow without unleashing anything edgy or untoward to undermine its potency.

With the Moon distributor's input I discovered that you don't need a premium Spotify account to access the streaming giant's substantial catalogue and found that it was easy enough to pick the 680D as the player from within the Spotify app. The results were limited by the low bit rate available to the unpaying user but it proved that this option works and works as easily as Spotify does. I also tried some MQA tracks from Tidal and contrasted them with similarly high res versions on Qobuz, the result was that MQA sounded better than it did the first time I tried it several years ago but that the straight PCM versions on Qobuz seemed a little more natural. There was a subtle sonic 'halo' on the MQA tracks that made them sound 'hi-fi' but which seemed to be there on everything, this requires a bit more



investigation but I'm still not convinced about the format. One track was Bowie's *The Man Who Sold the World*, which was slightly more solid in the bass and less phasey with better timing on Qobuz, a result which was replicated on Carla Bley's *Life Goes On*, a contemporary recording on ECM that is very clean and tighter and more solid on the PCM stream. Using the Moon purely as DAC with an external streamer in the form of an Auralic Aries G2.1 and a USB connection revealed that the conversion side of the Moon is very strong indeed. It delivered excellent timing, transparency and articulation from a variety of recordings and produced a sound that was fully immersive with new as well as more familiar albums. The Mind2 streamer onboard is a little calmer and more fluent in its own more restrained fashion, it provides a strong connection to the performance that pulls you in and discourages track hopping so that the musical message gets through. At least this is what happened with Keith Jarrett's *Paris/London Testament* solo recording where the intensity he builds up with a repeated progression at the end of *London Part VII* was mesmerising.



The Moon's extensive range of features and those that its Mind2 streamer adds to the picture make this a strong one box solution for the many requirements of the contemporary music lover. Whether you want to get the best from a CD transport or like to stream from the cloud or your own library it has all the bases covered, and then some, which means that the 680D should remain as relevant and musically compelling in five years as it is today.

### **Specifications**

- Type: Streaming DAC
- Distortion THD 1kHz: 0.0005%
- Signal to noise: 123dB @ full output
- Streaming services: TIDAL, Qobuz, AirPlay2, Spotify Connect, internet radio, RoonReady
- Digital Inputs: USB, AES/EBU, 2x coaxial, BNC, 2x optical, ethernet, Wi-Fi, Bluetooth aptX™
- Analogue outputs: balanced XLR, single ended RCA
- Supported File Formats: AAC, AIFF, ALAC, APE, DFF, DSF, FLAC, MP3, OGG, WAV, MQA
- Supported Digital Formats: PCM from 44.1kHz to 384kHz up to 32Bit, DSD64, DSD128, DSD256
- Output Voltage: not specified
- Control Software: Moon Mind Controller, Roon
- Dimensions HxWxD: 102 x 476 x 427mm
- Weight: 18kg