



EQUIPMENT REVIEW

HRT Streamer II and Streamer II+

By Alan Sircom

At the 2009 CES, Kevin Halverson (of Muse Electronics) and Michael Hobson (of Classic Records) announced the launch of High Resolution Technologies, with its two Streamer DACs. A year later, the same people in the same hotel room in Las Vegas announced the second generation of the company's Streamer and Streamer + USB decoders, plus an even better version, the Streamer Pro

Although these are audio components, they are rooted (both intellectually and commercially) in the computer world. It's funny how the perception of time is radically different between those two consumer electronics fields. A few audiophiles are filled with ire over HRT's short time-span between original and Mk II versions, while the computer enthusiast looks somewhat horrified that a product developed a year ago is still considered 'current', such is the pace of change in that market.

Externally at least, little has changed in a year. The clamshell case proposed as an alternative to the little red and grey trapezoid ingot never emerged and side-by-side you could easily mistake old and new, except for those little roman numerals. The pair are also just as easy to use, just plug and play with no driver-loading issues (you might need to adapt your computer's output, but that applies to any USB converter). We could go for a comprehensive chip-by-chip comparison, but the easy way of describing the new Streamer II and Streamer II+ is they bring asynchronous USB and 24bit, 96kHz processing to the party. They still improve performance as you move from basic Streamer to + (and the improvement continues up the scale),

but the change from Streamer to Streamer II resets the field confidently.

Last year, the Streamer was a good, relatively cheap addition to the USB DAC world and the Streamer+ was the one with the really good sound. Now, the basic Streamer II gets the really good sound and the Streamer II+ raises the bar still further. Which means the basic model leapfrogs over the performance of last year's Streamer+. That's not just down to the 24/96 processing. A lot comes down to the asynchronous USB connection.

As discussed in the Ayre DAC review also in this issue, asynchronous USB essentially causes the output of the computer to be clock-locked by the DAC. This asynchronous pathway has hitherto been the preserve of some distinctly high-end devices (Wavelength, Empirical, Ayre and dCS already on the market, with Resolution Audio about to launch its own products). Although there are rumours of an Arcam DAC also sporting asynchronous USB, at the time of writing, the product is still on the drawing board. This makes the HRT Streamer II the cheapest possible way of getting state-of-the-art USB connection.

HRT STREAMER PRO

Alongside the Streamer II and Streamer II+, HRT went up-market recently with its Streamer Pro DAC. Intended for semi-pro use, the bright blue DAC pushes the specs to the limit of USB powered products. It also uses mini-XLR connectors, more commonly seen in the pro-world. There are a number of regular-grade adaptors available, and the likes of Cardas have stepped in to make audiophile adaptors that let the Streamer Pro DAC talk to regular phono and XLR cables.

Unlike the standard products, the Streamer Pro makes a lot of demands on the USB it is connected to. Unfortunately, it seems all USB ports are not equal in the eyes of this DAC, and an underpowered USB output will hobble the Pro's performance. Simply running it from the USB port on the side of my 1996-vintage black MacBook made a sound that really wasn't up to scratch, and the base Streamer II confidently outperformed it on all levels; it was more focused, more detailed, less grainy... the works.

A powered USB 2.0 hub (costing about £20 from PC World) caused the sort of dramatic transformation on a par with Clark Kent and his fondness for phone booths. Instead of a soggy, grainy and almost muted sound, the Streamer Pro came to life, delivering a detailed, almost intimate sound, as if you have just been parachuted into the control room of the studio. The soundstage opens out and makes a far wider presentation than either of the base models. But most of all, the detail levels take a huge step forward, allowing the listener to really get under the complex interplay between percussion and clavinet on Stevie Wonder's 'Superstition' from *Talking Book*. The clever, deliberately near-random hi-hat work is easily masked, but here it works well to build tension. The same applies throughout; you pick out the musical details that would normally be hard to find.

This £475 DAC isn't really a challenge for the £1,995 Ayre QB-9, even when you factor about £100 in adaptors and powered hubs; it gets close especially in the all-important musicality stakes, but the levels of insight and detail and the lack of background 'hash' are considerably better with the Ayre DAC, when compared directly. OK, order is restored, but I suspect Streamer Pro capable of running from its own power supply would close the gap greatly. For that, we have to wait for the Streamer HD, out later this year...

TECHNICAL SPECIFICATIONS

Music Streamer Pro

Maximum resolution: 24bit, 96kHz

Input: Type II USB, asynchronous USB connection

Output: Mini XLR (balanced and single-ended adaptors available)

Output Impedance – 200 + 200 Ohms (balanced)

Frequency Response (20 Hz/20 kHz) – 0 dB/ - .6 dB

S/N Ratio (DC to 30 kHz) – 114 dB

THD+N (1 kHz FS) – 0.004%

Power requirements from USB: 350mA

Dimensions (WxLxH): 53x142x30.5mm

Price: £475

Does asynchronous USB make a difference? Definitely. It gives computer audio a sense of rootedness, solidity of instrument images within a soundstage and a sense of temporal rightness that it can sometimes lack. It's one of the reasons why the likes of the Benchmark and Naim are so successful – they also control the relatively wayward USB datastream (although using very different approaches). If your USB converter doesn't sport asynchronous connection or one of these other methodologies (sample-rate conversion or a look-up table of clock frequencies, for example), in many fundamental terms, the Streamer II might well have just made it obsolete.

It's easy to say that in the context of a multi-thousand pound product like the Ayre QB-9, because those products that cost hundreds still remain extant. But when we're talking the other way round (a DAC costing a less than a hundred and fifty quid taking on multi-thousand pound DACs on some fundamental sonic levels), things get heated. I'm sure there are standard-issue USB converters that don't need asynchronous operation to rise above the level of the basic HRT Streamer and its kin... I just haven't heard them yet.

This is a significant jump in technology. Asynchronous USB is yet another link in the chain to good sound from computer audio, but it's a profoundly important one. The new Streamers give music that sense of cohesiveness and directness that CD suddenly developed in the 1990s, when the format suddenly got very good, very quickly. ▶





TECHNICAL SPECIFICATIONS

Music Streamer II

Maximum resolution: 24bit, 96kHz

Input: Type II USB, asynchronous USB connection

Output: two phono sockets

Frequency Response: (20 Hz/20 kHz) – 0 dB/ - .5 dB

S/N Ratio: (DC to 30 kHz) – 98 dB

THD+N: (1 kHz FS 44.1 kS/s) – 0.010%

Power requirements from USB: 200mA

Dimensions (WxLxH): 53x104x30.5mm

Price: £139

Music Streamer II+

Maximum resolution: 24bit, 96kHz

Input: Type II USB, asynchronous USB connection

Output: two phono sockets

Frequency Response: (20 Hz/20 kHz) – 0 dB/ - 1.4 dB

S/N Ratio: (DC to 30 kHz) – 101 dB

THD+N: (1 kHz FS 44.1 kS/s) – 0.0008%

Power requirements from USB: 350mA

Dimensions (WxLxH): 53x130x30.5mm

Price: £329

Manufactured by

High Resolution Technologies

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- It's an immediate thing, you'll either notice the snap into focus, or it will simply pass unnoticed, much like there are those who are profoundly affected by a component's ability to keep time, dynamic range, or specific instrument timbre, and those who aren't. And count me among those sensitive to that focus. The received wisdom in USB conversion is that a self-powered DAC trumps one powered by the USB itself. The Streamer II challenges that head on.

Last year's Streamers were somewhat lacking in high-frequency extension (especially the basic model) and made a slightly mixed together plum-pudding of an image. That's all gone with the new models. The sound is much closer to the output of a good CD player; precise, accurate and tonally correct. The HRT soundstage is not an expansive one; sounds sit between the speakers rather than spread wide and deep. It's sort of string quartet sized, instead of expansive orchestral sized – both models can more than handle orchestral music well, whether that be the precision of Haydn or the romantic swells of Tchaikovsky, with the proviso of presenting a tightly ordered ball of sound fixed between the speakers.

'Luka' on *Solitude Standing* by the 'mother of MP3' (Suzanne Vega... under the circumstances, this seems appropriate) ably highlights the difference between basic Streamer II and Streamer II+ versions. That oh-so-eighties Yamaha DX7 synth sound and the compressed drum sounds is brought more to the fore with the II+, where the basic DAC leaves these sounds more a part of the mix. Instruments just seem to present themselves with more precision and fidelity on the Streamer II+ in side by side comparisons. As standalone entities, the Streamer II is a little grainy, something that simply doesn't figure on the Streamer II+. How big an issue that is depends on your musical tastes. If you listen to a lot of grungy rock guitar, the distinction might be lost, but if your music has a lot of pure tones in it (female vocal for example), the Streamer II+ becomes an easily-justified expense. For the audiophile looking to branch into computer audio, the Streamer II+ is a real no-brainer, then.

Where the Streamer II+ is clearly the better sounding product without commanding a huge jump in price tag, the Streamer II is perhaps the more significant of the two. If you are already into good sound, the chances are you would immediately pick the Streamer II+ because of its performance. If you want to know what all the fuss is about, the Streamer II will turn any computer into a credible music player, and turn any listener into a fledgling hi-fi buff. And if you already have a USB digital converter, even the cheapest Streamer II might be better... +