

# Musical Fidelity V-Link 192 (£229)

The first V-Series USB-to-S/PDIF converter handled hi-res media up to 24-bit/96kHz but the upgrade to 24-bit/192kHz performance has been far from straightforward  
 Review & Lab: **Paul Miller**

**E**xactly one year ago we reviewed the first in a new breed of digital component – the DDC or Digital-to-Digital Converter. Musical Fidelity's V-Link enabled enthusiasts to interface the USB output of their PC or Mac with the traditional S/PDIF digital input of their favourite outboard DAC, AV amp or processor. However, the V-Link was never tasked to handle 192kHz files. Neither are any of the various flavours of Windows OS – only the more recent Mac OS X offers inbuilt 192kHz support over USB.

**UPGRADE PAINS**

Birthing the new V-Link 192 (strictly, the V-Link<sub>192</sub>) was not so simple. MF's engineers were required to write a bespoke Windows USB driver with a little help from XMOS and its XS1-L01A RISC processor (which converts USB to serial LPCM and also drives all those sample rate LEDs on its 'fascia'). Mac OS X users are not required to load any additional drivers but the Windows utility is worth the aggravation, the driver control panel providing native ASIO support with user control over the

USB streaming mode and ASIO buffer size, trading latency against possible dropouts. In Win7 the use of WASAPI in exclusive mode is recommended and configured in the player application, such as J-River Media Centre.

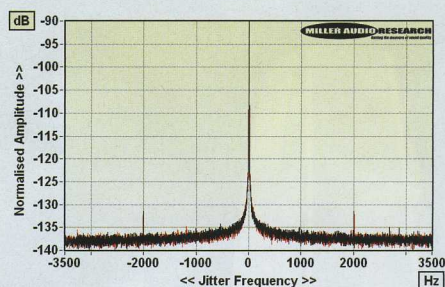
Data transfer remains asynchronous over the USB interface and governed by two clocks in the V-Link 192, one for multiples of 44.1kHz and the other for multiples of 48kHz. The driver licencing costs, along with the added complexity of the V-Link's hardware (and all those LEDs!) have doubled the price of the V-Link, but £229 buys us a more sophisticated unit.

'There is no practical difference in decoded jitter'

Gone is the optical S/PDIF output, which would only serve up to 96kHz, to be replaced by balanced S/PDIF over XLR and a transformer coupled coax. While these are 'isolated', it's debatable whether they are galvanically so...

**SPOT THE DIFFERENCE**

...which implies any 'sound' attributed to the new V-Link may still be due to circulating earth currents that traverse the components of your system. I used



**ABOVE:** Naim's ND5 XS – jitter spectrum direct via S/PDIF (black) and USB via MF's V-Link<sub>192</sub> (red)

the new V-Link with a number of DACs, including the T+A Media Player [see p26] and Naim's 192kHz-compatible ND5 XS [full review next month]. As the graph (above) clearly illustrates, there is no practical difference in decoded jitter between a straight S/PDIF link and USB-to-S/PDIF via the V-Link, a transparency reflected in the near-indistinguishable differences in sound quality. The ND5 network player remained identifiably so, as did the leaner and slightly cooler-sounding T+A.

The only occasion that I did detect some 'insertion loss' was via the digital input of my Devialet amplifier. Here the rendition of Naim's own 24-bit/192kHz *Meet Me In London* [NaimHD021] was just that bit darker, the guitar highlights warmer, Sabina's voice fractionally more haunting. But it was close, very close. ☺

**HI-FI NEWS VERDICT**

Now at some small cost, the V-Link finally offers full compatibility with both linear and compressed music media (lossless or otherwise) right up to the premier 24-bit/192kHz standard. If you're wedded to the sound of a legacy DAC or AV amplifier then this unassuming silver box brings the convenience of USB functionality with the potential to tap huge reserves of stored music on a personal computer.



**ABOVE:** USB in, coaxial and XLR S/PDIF out, with a host of LEDs for incoming power, sample rate recognition and lock