Subject: MH Link vs USB driver: Latency

Posted by tompisa on Fri, 08 Feb 2019 19:23:18 GMT

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I wonder if there are any differences regarding the usage of LH Link driver vs USB (?)

When using Cubase, or Studio One or Logic with a single ULN-8 or ULN-2 all DAWs showing significant higher values of the MH link round trip latency compered to USB

Whats the reason for that and would I have to assume that there might be also differences regarding the audio quality?

It's not relevant for me but 'Id just like to understand why that is.

Subject: Re: MH Link vs USB driver: Latency Posted by bj on Wed, 13 Feb 2019 07:28:31 GMT

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I believe that the Apple USB driver is not reporting the ADC/DAC latency. So the reported USB latency is not accurate; the actual latency is almost certainly higher.

The MHLink driver also has somewhat higher safety offsets to cope with the scheduling jitter for sending Ethernet packets.

The USB transport is 24bit, the MHLink transport is 32 bit; whether or not that makes a difference is debatable.

The MHLink transport supports a far higher channel count, and works properly at 2x and 4x rates when MIO Console is active, whereas the USB transport may encounter errors at > 1x rates when MIO Console is active.

These differences are all with the Apple USB driver. When we provide a custom driver for USB the USB limitations should be reduced. But USB will not provide as many total channels as MHLink does.

Subject: Re: MH Link vs USB driver : Latency

Posted by tompisa on Wed, 13 Feb 2019 09:35:46 GMT

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thanks BJ, understood. Makes sense

Subject: Re: MH Link vs USB driver: Latency

Posted by VIYATSIATA on Sun, 24 Mar 2019 19:46:10 GMT

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bj wrote on Wed, 13 February 2019 02:28I believe that the Apple USB driver is not reporting the ADC/DAC latency. So the reported USB latency is not accurate; the actual latency is almost certainly higher.

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Subject: Re: MH Link vs USB driver: Latency Posted by tompisa on Sun, 24 Mar 2019 19:56:23 GMT

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yes, that was my question and BJ response was very logicically too.

I am using MHLink meanwhile, my experience is that MHlink seems to be more stable. I had some Cubase crashes before, when using USB but not under MHlink. More channels and the 32 bit thing seems to be a serious advantage over USB