Subject: Re: Blu-Ray Disk For Music
Posted by Adveser on Fri, 21 Jan 2011 02:10:02 GMT
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Lancelot wrote on Thu, 20 January 2011 19:22Adveser wrote on Tue, 18 January 2011 23:07Once you hit 24-bits at 48Khz, the returns are diminished enough to be not worth the money o hassle.

Can you explain a bit more on this? What I'm understanding is that any rate higher than 24-bit at 48Khz won't matter anymore because the quality of the sound will be no different so the price is not worth it. Is this correct?

It all depends. Some DVDs may have been mastered using a 16-bit source and the Blu-Ray might me the original analog source.

I made a mistake though, DVD is 20-bits per sample and not 24 as I said. So If Blu-Ray is offering 24 bits, it is a drastic improvement.

I will answer the question as it stands though.

48Khz has a frequency response of up to 24Khz, well past our hearing limits, 96Khz goes up to 48Khz. The catch is anything old enough to be sourced from analog tape is not going to take advantage of that. I have yet to hear any "old" album get anywhere close to the 22Khz of a CD. The other issue is that High-End must be rolled off at some point to sound pleasant. Now in theory a 24-bit noise floor that caps off at 48000hz would not need to be rolled off because our ears will take care of it as long as there are frequencies that high. Until they start recording stuff with microphones that get up to 40,000hz, we are stuck having to roll off.

If you hae a SACD at 24-bits and 96Khz resolution you are in no better shape getting a disc at 24-bits and 192Khz resolution. And depending on the material, you are probably not getting a better frequency response than 44.1Khz can offer. The 16-bits is a problem in so far as you need something to remain fairly loud to be accurate. 24-bits gives you a lot more noise floor and hence a lot more resolution because the noise floor is not masking high frequency information that is barely audible, but yet has a massive effect on the timbre of instruments.