Subject: Paris recording+playback: linear or compression?
Posted by harry e on Thu, 06 Sep 2018 20:12:57 GMT
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can anyone tell me, when recording or playing back paf files in paris, is there any kind of compression scheme going on, or is it strictly a linear affair of digital audio, with absolutely no compression going on at all?
I ask this because, when I use an alesis m20 to record or playback, there is no compression whatsoever used- and you can HEAR it. it sounds like open reel to reel, to MY ears, only even better! Paris comes very close to sounding like open reel, but not quite- and I'm wondering if any kind of compression scheme or algorithm might at least in part explain it--- or, like the m20, does paris record and playback TOTALLY in linear fashion?--- VERY useful information to me to know- and I'll very much appreciate anyone who can give me a correct and knowledgeable answer.
thanks in advance.
harry

Subject: Re: Paris recording+playback: linear or compression?
Posted by mikeaudet on Wed, 12 Dec 2018 02:48:33 GMT
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There's no compression in the PAF file format. It has some extra zeroes added in every 30 samples to accommodate a quirk in the transfers of 24 bit words with the DMA controller used on the EDS cards. Otherwise, it's straight PCM.

Subject: Re: Paris recording+playback: linear or compression?
Posted by Kim W. on Thu, 13 Dec 2018 15:51:28 GMT
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To be honest, whilst I initially recorded in .paf (24 bit) I didn't detect any appreciable difference in final mixes using 16 bit 44Khz. That's CD quality, and let's face it,most stuff nowadays gets crunched down to mp3, and worse still, to iTunes, which provides it's own "mastering". (ouch). I find it much easier to work this way, in case I need to import/export audio.
To each their own I guess.

Subject: Re: Paris recording+playback: linear or compression?
Posted by mikeaudet on Thu, 13 Dec 2018 16:45:34 GMT
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I once did a test. I recorded something at 24 bits. I then made a copy and truncated it to 16 bits. I flipped the polarity of the 16 bit version and mixed it back into the original 24 bit file.

I knew that the audio that was left over would be the extra information captured at 24 bit but not present at 16 bit.

I played back the file and heard...absolutely nothing.

I zoomed right in, and I could see something down at -90 dB. It was hiss.

When one considers the dynamic range of the best mics barely approach 90 dB, it makes sense that the additional bits in a 24 bit file are capturing mostly hiss from the mic.

Of course, headroom is good. But, it's not like 16 bit sounds bad.

All the best,

Mike
