
Subject: Re: What are possible future audio innovations?

Posted by [Adveser](#) on Mon, 14 Feb 2011 02:14:23 GMT

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Well, a higher bit-depth is going to result in a much more accurate recording. Keeping in mind that the example is an ideal scenario, that is for two reasons primarily:

1. an almost non-existent noise floor which will cease the masking very high frequencies that affect clarity and accurate timbre.
 2. The average volume can be much lower while maintaining a "true" resolution. The way digital works is it counts values. If there are no values (zero value) at the higher volume bits, the bitdepth is truncated. They add a dither to maintain a certain bitdepth at all times to prevent distortion (as well as it's other function to act as negative feedback. A good classical recording during a soft passage will be presented at a much higher resolution at lower volumes. Hypothetically going from 12bits to around 20bits of information for the same sound (Example numbers)
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