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Subject: Re: Buying Vinyl Records  
Posted by [Adveser](#) on Sun, 19 Dec 2010 00:47:38 GMT  
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Stick with me, this has a point.

There is something the internet audiophiles don't understand. It has been the subject of much debate and moaning. The loudness has been scapegoated more than anything.

It is that 16-bit Digital technology has the overbearing quality that it must be mastered with very little headroom or else the volume will not peak in certain areas of the audio spectrum and it will truncate bits.

To understand this, let's start with a bass guitar being mixed in 16 bits. If it is the only thing in the 50-200Hz Range in the mix, other than the kick drum, and it peaks at only -12db, you are getting much less than 16-bit resolution in those frequencies. The solution is to compress everything in mastering to at least -6db. I don't know the db to bits ratio, i'm afraid, so I can't say what is what. It could be 6db or it could be 1db. I don't know if it is linear or not. Volume is directly proportional to bit depth and hence, resolution.

Now, Vinyl has absolutely none of these problems, but it has a vast array of it's own problems to be considered.

The bottom line is that, if it is a classical recording, soft jazz or anything that requires a lot of headroom and accuracy far below it's volume threshold, Vinyl will sound far more accurate.

If it is a digital recording where the mean volume is only about 6db lower than the peak, CD is your best best. Vinyl will never be able to touch such recordings in accuracy or sonic detail.

The debate has been muddled treating the two as equals of some sort, when they function much differently.

Briefly, the loudness war complainers are only right in one area and on area only, which is CD's should never clip past 96db. However, their other gripes are ill-informed and they relying on the logic that analogue devices use, that is, that quiet sounds and loud sounds have the same resolution. They do not in the digital world. Until 24 bit recordings are commercially viable, get used to hot and over compressed masters because that is the only way for digital to present an accurate measure of the audio. Albums that peak at 90db instead of 96db (common around the 1986 era of CD) were only 14-bit recordings.

With CD, you take your noise as truncated bits or distorted peaks. With Vinyl, you take your noise as tracking noise. Pick your poison until 24-bits is viable.

I'm not going to say yes or no on the vinyl. These are the real limitations of digital and analogue.

Go read the wikipedia page about vinyl and can read exactly why they were discarded. It simply takes a high quality copy for vinyl to work.

