Subject: Sanity check
Posted by Wayne Parham on Mon, 04 Jun 2007 16:02:43 GMT
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Not to be overly contrarian, I have the greatest amount of respect for all you guys but I have to remind you about something. The mere step of digitizing an analog signal removes information from it. Digital conversion is a lossy compression system. Some would say it is pure folly to digitize a music signal at all. I am not necessarily one of those, but remember that there are lots of analog lovers that would poo-poo the use of any digital format, whether compressed or not, "lossless" or not.An analog signal that has been digitized and stored can never be returned to the original analog signal exactly as it was in analog form. The sampling rate (bitrate) and sampling width (number of bits) set the limit of how much information is lost. So remember always that all digitized signals have information loss, and all are therefore "lossy" systems. A compresion system that is "lossless" cannot overcome this limitation, it just uses a compression system that preserves the digital data without further data loss.Even analog systems suffer from information loss. They all have a noise floor that describes the lower limit of their ability to store and reproduce a signal. Signals that are below that threshold are lost, or at least mofified by noise. Most analog systems suffer from outside noise sources too, like mechanical vibration and what not.I felt the need to remind everyone about this. MPEG/JPEG compression is a lossy compresion system, that is true. But you can set the level of loss. If set low enough, there is less loss in the compression system than there is in the digitizing process. At that point, it's mute. Because of that, I'd suggest that all other factors (bitrate, sample width, etc) be considered, not just the compression system used.