Subject: Re: Normalizing
Posted by Adveser on Sun, 19 Sep 2010 04:16:44 GMT
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Here is what I use it for:

*In conjunction with DSP because a non-clipped waveform will be drawn "corrected" if I leave enough space for it to draw the missing peaks. I go with about 93db. Attenuating the sound any further will reduce the high frequency output to an unacceptable level, which is exactly what most people do when they use the default 89db setting.

*When I record a track and it never peaks, thus it will raise the volume to it's loudest possible point before clipping occurs. See below about MIDI.

*You mentioned sampled drums. In my experience any MIDI sounds tend to distort very harshly even if they don't clip from too much volume. I think it may have something to do with upconverting from a lesser sample or bit depth because it has a much lower noise floor, so it clips "invisibly" somehow. So I keep anything like that as low as it was recorded and make the rest of the mix around how loud samples can get. Once there is any mixdown, the volume can be brought up to an acceptable level because the other frequencies will correct the oscillations in the samples. The best way to work with MIDI is to loopback the signal and re-record it instead of directly using the original sound because this fixes any of the above.

*Look into compression, it is like the kid brother of normalizing, it guarantees to raise everything in the signal up to whatever db setting you tell it to use. Only use it for recordings though, don't ruin your music collection giving this a try.

*Generally after heavy Equalization, the peaks are going to be no where close to zero db, normalizing fixes that.

*Normalizing is not a substitute for recording at a proper level. For example, if you record everything at -18db you are actually truncating bit depth in the recording itself. Granted if you are using 32-bit recording, this isn't really much of an issue because before they go to cd they are going to need to shed about 150db of noise floor and anything counted above the 16th bit is going to disappear. The good news is it takes bits from the "bottom" so you won't have your 32-bit recordings peaking at half their volume in the transition, but the quieter half is going to be boosted, including any recording noise or floor noise to squeeze in all the info. While we're on the subject, yes, reducing the "wave" volume in windows mixer is truncating bits.