Audio Distortion/Level Boosting

Posted by Ambientologist - 05 May 2019 06:56

I can see there are a few threads on audio distortion at the moment, but I didn't want to hijack them with my particular questions.

A .wav exported from Ableton Live, then converted to .mp3, seems to be boosted by about 6dB when importing it into Lightworks. Is that common? I've never touched the audio section before, but I'm wondering what the LR channel is representing. Is it the output, while A1 and A2 are the input?

A1 and A2 never exceed 0 (because why would they?), yet the LR channel seems to want to blow them through the roof! Is there a reason for this?

Cheers

==========

Re: Audio Distortion/Level Boosting

Posted by hugly - 15 May 2019 08:33

RWAV wrote:

Yes - and to add - the required level reduction needs to be made at track level - not at L/R output. Doing the latter reduces the dynamic range of the output.

My wording to describe the phenomenon would differ from 'reduces the dynamic range', but I fully agree with the suggestion not to use the faders on LR *, if correct meter readings count.

Edit *: As it stands now, with V14.5.

==========

Re: Audio Distortion/Level Boosting

Posted by David Rasberry - 15 May 2019 15:09

The LR meter levels in DBFS are absolutely correct regardless of the mix fader settings.

Export levels are accurate by the meters IF the computer system audio device settings being used are not attenuating the export.

Lowering the mix faders to attenuate excessive export levels is a perfectly viable way to prevent clipping.

==========

Re: Audio Distortion/Level Boosting
Posted by hugly - 15 May 2019 16:45

Just to say, all audio data on export run neither through the OS mixer nor through any OS sound device. They are digital data created by Lightworks during the audio decoding/encoding process written directly to file. The OS sound devices are only used for audio preview/monitoring and capture (e.g. voice over) and there, the OS mixer settings can influence the signal level, but not in exported file.

To verify, with Lightworks running, disable all audio devices (or disconnect physically) and export. Enable the devices again and listen.

==========

Re: Audio Distortion/Level Boosting
Posted by David Rasberry - 15 May 2019 17:59

Not true. The system audio device sits between Lightworks and the export file encoding. I have clearly proven that. You can prove it to yourself if you simply try it.

I posted a complete test of the Windows MME audio device settings affecting Lightworks exports in one of the other numerous threads you have started over this non-issue. If I was exporting via an external ASIO driver interface device, the same thing would happen if the device I/O channels are not set to unity gain.

Reduce the audio gain on your headphone output in Windows and it will reduce the export file level too UNLESS you set the sample rate and bit depth in the MME settings to match your timeline audio format in Lightworks and assign that audio format application priority. But you can only do that for one format, which means you can't mix audio of different formats in a sequence.

I don't use anything for production except 24 bit 48KHz WAV files and I have none of these "mysterious" level or metering inconsistencies on exports.

==========

Re: Audio Distortion/Level Boosting
Posted by hugly - 15 May 2019 18:17

I remember, you have chosen Harrison Mixbus as reference which runs all channels through a

compressor by default.

==========

Re: Audio Distortion/Level Boosting

Posted by RWAV - 15 May 2019 20:56

Lowering the mix faders to attenuate excessive export levels is a perfectly viable way to prevent clipping Not sure which mix faders are reference by the above - but in this example ---

--- it is arguable that, given all the available tools, pulling down the L/R faders may not be a genuinely viable choice. Pulling down the offending track levels would be fine; as would routing the tracks via a LW Mix but both of those are static settings for export.

In the example, being a pre-mix in LW, all mix levels were controlled by the LW node based track sound levels using a Mackie Control - the track sound level capability being an 'invisible' dynamic tool.

==========

Re: Audio Distortion/Level Boosting

Posted by David Rasberry - 15 May 2019 21:40

---

hugly wrote:

I remember, you have chosen Harrison Mixbus as reference which runs all channels through a compressor by default.

No it doesn't. There are compressor objects on every channel,mix bus, and the master outputs. But they are not active unless you turn them on.

==========