



## KITCHEN MASTERING — STREAMING AUDIO CONSIDERATIONS

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### STREAMING AUDIO

As the cassette tape and CD's gained worldwide acceptance due to their convenience over vinyl, so too has streaming audio become a major distribution channel for all forms of music. With the gaining acceptance and utilization of the current major streaming content providers, it is of utmost importance that your music sounds its best and as close to a high-resolution master as possible.

One of the most challenging and concerning issues with streaming media is that the distributors supply music from a broad spectrum of genres, eras, and with wildly disparate production values. This fact coupled with the desire to provide the consumer with a quality listening experience, and in particular, with respect to amplitude variation between songs & compositions, has forced the streaming content providers to implement various forms of loudness management.

Loudness management is implemented either by assigning a volume reference level to a particular track and then modifying the track to match a desired reference level — or —utilizing dynamic processing (compression / limiting) to increase or decrease the amplitude of any particular track. The former methodology is the least damaging to any particular track and the latter methodology may have a major deleterious impact on the integrity of your master.

In either case, adherence to the adopted reference level of any streaming content provider is highly recommended, and in our opinion, welcomed from an aesthetic standpoint. Why? By setting reference levels with adequate headroom (available amplitude above the reference level to full-scale digital zero (0dBFS), this practice 'evens the playing field' with respect to loudness and penalizes masters that are dynamically processed with a heavy hand.

It is widely known and accepted that a mix with little to no peak limiting turned up to the same perceptual volume as a heavily peak limited mix will always sound better. Between the late '90s and throughout the first decade and a half of the 21st century, with the advent of increasingly effective digital dynamic processing tools, the practice of making masters with increasingly high average levels became known as 'The Loudness War'. It was a period of frustration for most mastering engineers as clients (labels, producers, mixers, and artists) all desired louder and louder masters, mistakenly equating loudness with quality or 'professionalism'. Unfortunately, many great records were diminished in quality due to this practice.

Even though the majority of streaming content providers currently stream data compressed media, the impact of preset reference levels and loudness management systems is a very positive thing with regard to the quality of the music. No longer is it necessary to compromise the integrity of a good mix for the sheer sake of perceived volume. Dynamic processing now only needs to fulfill an aesthetic role and may be utilized as another creative tool that may or may not be necessary to realize the potential of any particular project.

What this equates to with regard to streaming media production masters is that we now generate masters for particular streaming content providers at their specific reference level or at the lowest adopted streaming reference level (and as recommended by the A.E.S.) of -16 LUFS. Additionally, we utilize any content provider's reference level when making aesthetic judgements relative to any dynamic processing that may be applied to any particular project, and adjusting as necessary, in order to deliver the highest quality master that maintains the project's artistic integrity.

We strongly advise our clients to take advantage of our service to generate specific streaming masters for their projects, your music and your fans will benefit from the additional attention to detail.

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— Brent Lambert