



KITCHEN MASTERING — MQA [MASTER QUALITY AUDIO]



MQA You may be familiar with Mastered for iTunes [MFiT] but are you aware of MQA?

MQA is a process developed by Bob Stuart (of Meridian fame) involving both hardware and software that produces a specially encoded file that exceeds the quality of what is currently available from lossless or 'lossy' encoders.

As described by MQA; *“the process goes beyond “lossless” and way beyond lossy(MP3, AAC, etc.) technologies to bring the sound of the master to everyone – in a file format that drops into today’s infrastructure without any need for expensive support.”*

An MQA encoded file is approximately 15% larger than a typical CD audio file (PCM stereo 44kHz @ 16-bit resolution) and purportedly, according to MQA; *“can deliver sound equivalent to 96k. And at CD data rate, MQA is better than 192k today.”*

Another interesting fact is that at higher sample rates, the data rate remains relatively constant. Additionally, MQA can purportedly resolve two discrete sounds as close as 8µs (microseconds) apart. This hints to the fact that the process, in direct juxtaposition to other encoding processes, does not use temporal masking in an effort to reduce data rates. This is of huge importance to me personally as I have always been a firm supporter of higher sample rates as they provide the ability to resolve smaller interaural arrival time differentials, which in my opinion, are a huge component of what makes a recording 'life-like'.

This capability of MQA alone is exciting enough that we have begun the process of acquiring the equipment and the license to be able to offer this service to our clients.

Given that iTunes has reneged on their original intent to offer high-resolution audio via their iTunes Store, the modest data rate increase that MQA imparts, coupled with the increase of available bandwidth available to consumers and the decrease in the price of data storage, we believe that MQA may finally offer a pathway for delivering high quality audio to the average consumer at a minimum penalty in data size increase. It has always been frustrating to work on a quality master in high resolution to only 'dumb-down' the final product to CD resolution for deliverable to the consumer. MQA is a great step forward in including the end-user into the ultra high-fidelity world that we as mastering engineers partake in, and at a minimal price.

Of note, both Tidal and the Universal Music Group have committed to offer MQA encoded content to their customers. Hopefully, this coupled with the growing list of hardware manufacturers supporting MQA decoding will increase awareness of the process and demand for the encoding of production masters.

Another bonus feature of MQA is that it affords the opportunity to include way more metadata than all other formats currently available. The inclusion of photos, text and other pertinent data along with the audio file is now a reality.

As soon as we receive our license, we will offer and recommend this service to all of our customers. In the meantime, we highly recommend checking out MQA encoded music on a quality DAC, such as Mytek's *Manhattan* or *Brooklyn*, with a great pair of headphones or monitoring rig, you won't be disappointed.

Here is a link to a video of Bob Stuart explaining the process: <http://www.mqa.co.uk/professional/the-tech>

— *Brent Lambert*