



REDEFINE THE POSSIBLE



## Introducing MQA

### Master Quality – Authenticated.

The goal to bring the listener *exactly* the sound heard in the studio when the recording was *approved* has so far never been attained – partly because, on the journey from the microphone to your ears, every single process degrades the quality. This loss of quality became severe with the arrival of personal stereo devices, where we gained convenience at the expense of lower sound quality. Vital elements of the music were thrown away to fit a thousand songs into your pocket, or millions in the cloud – on the way losing emotion, realism and engagement.

Meanwhile, in production and among audiophiles, there has been a kind of ‘arms race’ to capture at higher sample rates or data rates, believing that the *bigger* the numbers, the *better* the sound. Yes, higher sample rates can make improvements to the sound, but most of the ‘encoding space’ created goes unused. It’s like putting the music into a bigger box, most of which is empty – it’s inefficient and because you can’t tell where the music’s essence is, it’s hard to lift it out undamaged.

MQA, or *Master Quality Authenticated*, brings together the three ideals of studio-quality sound, convenience and end-to-end authenticity. It uses a completely new concept of capturing the *total essence* of an original recording and conveying it *all the way to the listener*, assuring that what they are listening to is *identical* to the master recording.

Sounds like magic? It does! MQA has been confirmed over years of development and in listening with artists, mastering engineers and producers around the globe. MQA is innovative, enabling and exciting.

### Music captured the way we hear

MQA begins with the sound that’s been signed off by the artist and producer. Every last subtlety of that master recording is captured using a new sampling method that can resolve the finest time divisions we can hear and deliver them in your player. We call the process “Encapsulation”: it is informed by the latest neuroscience

and psychoacoustic research that shows how we identify and locate sounds, and that timing details of a few microseconds are important. This new technique combines this extreme level of time accuracy with authentic dynamic range.

MQA also uses innovative lossless processing to build a file or stream which also delivers sophisticated metadata: details of the recording, instructions for the decoder and D/A converters plus how to create an *authenticated exact reconstruction* of the original *analogue signal*. MQA can be delivered inside any *lossless* container, e.g. as ALAC, FLAC, or WAV.

Unlike the huge files from super-high-sample-rate systems, the MQA file is extremely efficiently encoded and yet it contains and protects *all the sound* of the original.

MQA is decoded by a simple decoder – which can be an app, a software player or hardware – and it reconstructs the *exact sound* approved in the studio along with an indicator to *authenticate* that what you are hearing is a true rendition of the original master recording; it works for all masters between 44.1 kHz and 768 kHz sampling.

MQA has another unique feature: the decoder gives the highest possible sound quality, but you may not yet have a decoder everywhere you listen – in the meantime the MQA file plays on normal equipment but instead of ‘studio’ you get ‘CD’ quality.

However you listen, with MQA you’ll experience a clear, accurate and authentic path from the studio all the way to your listening environment – at home, in the car, on the go – and you’ll know because MQA means master quality – authenticated.

*MQA may be used for downloads or streaming.*

*Bob Stuart, Co-Founder Meridian Audio, Creator of MQA  
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