



Neo X-treme Technology (NXT)

For almost two decades, bass players have been primarily choosing between two different speaker technologies, ceramic and neodymium. In the early 2000's, when neo magnets first made their way into the pro audio world, players were initially very excited about the weight savings these newer designs offered. However, they quickly realized this newer technology came with a different voice from what they were accustomed to with their heavier, ceramic based designs. Thus the tone vs. weight "tango" begins!

So what makes these two technologies sound different? After all, isn't a magnet a magnet regardless of what material it's made of? From a pure magnetic strength perspective, the answer is yes. But it's not about the strength of the magnet that's in question here. What we need to explore are a few things: The difference in magnetic field geometries each motor technology produces and how this magnetic field forms in and around the magnetic gap where it interacts with the speaker's voice coil, and what effect the inherent construction of each motor system has on the motor's inductance and how this change in inductance effects the tone and frequency response of the speaker. This differing inductance also affects how the motors behave dynamically, which contributes to the different warmth and feel each motor technology is known for. Simply stated; Neo, with its lower inductance motors and voice coil's closer proximity to its magnetic field, produces a much sharper attack to the note, versus a ceramic-based system where a softer, warmer attack is the characteristic it is known for.

Albert Einstein once defined insanity as, "Doing the same thing over and over again expecting different results". Thinking neo speakers could sound similar to their ceramic counterparts, without rethinking how the neo motor is designed, has confirmed his theory, and is why almost two decades later we're still asking the same question, hoping for a different answer.

Back in the fall of 2018, Celestion visited our Whitinsville, MA factory inquiring how we could work together on future projects. Respecting our leadership and reputation in the Bass Amplification industry, they were very interested in having Celestion products included in future Bergantino designs. It was a very productive and informative meeting, discussing the need to reevaluate and revisit the current design approach to neodymium motors as it pertains to MI applications. So they took our ideas and design recommendations back to the UK where it landed on Director of Engineering, Paul Cork's desk. Paul took great interest in this project and quickly went to work developing what is now our new and exclusive NXT neodymium motor. No longer will the bass community have to depend on the PA industry for its transducers, where SPL/Watt, not tone, is the primary design objective. With our new NXT motor systems, close attention was paid to the differing parameters and characteristics each motor system produces and how these parameters contribute to the inherent tone and feel of each motor technology.

The resulting motor design gives our NXT speakers a very unique and musical tone not available from any other transducer on the market today. With these new motor designs we have achieved a tone that we believe gives bass players the “Best of Both Worlds”: The warmth and feel of ceramic based speaker with the clarity and immediacy of neo. And they'll be right at home with any musical genre; from Rock to Country, Jazz to Blues, and Prog to Metal.

We're very proud and excited to offer our new NXT speakers to the bass playing community, as we believe they represent a speaker technology break thru that bass players have long been waiting for and expecting from their lighter-weight designs. We're also very excited to be partnering with Celestion, manufacturer of many of the most renowned and sought after MI speakers in the world!