

Celestion TSQ2160



At this year's Integrated Systems Europe (ISE) conference, Celestion, a manufacturer of professional loudspeakers and compression drivers for sound reinforcement applications, announces the debut of the TSQ2160. This 21-inch neodymium magnet low-frequency driver follows the groundbreaking launch of the flagship TSQ2460, further expanding the revolutionary Ten Squared (Ten2) Series.

The TSQ2160 was born out of a specialist development program spearheaded at Celestion's R&D facility in Suffolk, England. This program focused not just on peak output, but on maintaining that performance throughout the speaker's entire lifespan - even after hundreds of hours of use. The TSQ2160 delivers a combination of massive power handling and excursion control, along with superior audio reproduction, fulfilling the need for unwavering performance in high-output subwoofers, large-format line arrays, and two- or three-way loudspeakers.

The TSQ2160 features an immense 5000W continuous power rating and achieves 97.5dB sensitivity. These achievements are intrinsically tied to its 6-inch (152 mm) diameter round copper voice coil and advanced magnet cooling technology. Meticulously built on a state-of-the-art robotic production line in the UK, the driver ensures the highest levels of precision and repeatability.

At the heart of the Ten Squared philosophy is a commitment to reduced thermal stress. The TSQ2160 utilises the Precision Tuned Venting (PTV) system, a three-channel cooling method that ensures constant airflow across the frequency band. This thermal performance is further enhanced by its proprietary voice coil structure, custom wound in-house by Celestion. They synergistically combine to maximise cooling potential allowing the TSQ2160 to operate at temperatures up to 80°C lower than competing drivers in its class. By significantly lowering temperatures, the TSQ2160 reduces power compression and thermal stress, directly contributing to its high-performance longevity.

The TSQ2160 is constructed to maintain its integrity even during maximum cone excursion. The Reconfigured Magnet Assembly allows for substantially greater movement (Xmech) while ensuring that electrical motor strength (BI) and mechanical compliance (Cms) reach their limits at practically the same point. This results in consistently low distortion performance even when pushed to the limit.

Durability is further enhanced by a dual polysiloxane-laminated suspension, which prevents the system from losing stiffness under heavy loads. To address common failure points, lead-out wires are precision woven through laser-cauterised holes in the suspension to reduce "whipping" and fatigue. Additionally, the driver features a double-sided, water-resistant cone coating for protection against humidity and the elements.

"The Ten Squared Series reflects Celestion's unwavering commitment to excellence," commented Paul Cork, Celestion Head of Engineering. "The TSQ2160 doesn't just provide power; it provides consistently lasting, superior performance, extending the new benchmark for professional low-frequency audio that we established with the TSQ2460."

Visit Celestion at Integrated Systems Europe (ISE) 2026, Fira de Barcelona, Level 0 - 7D860 - Audio, 3-6 February 2026.

www.celestion.com