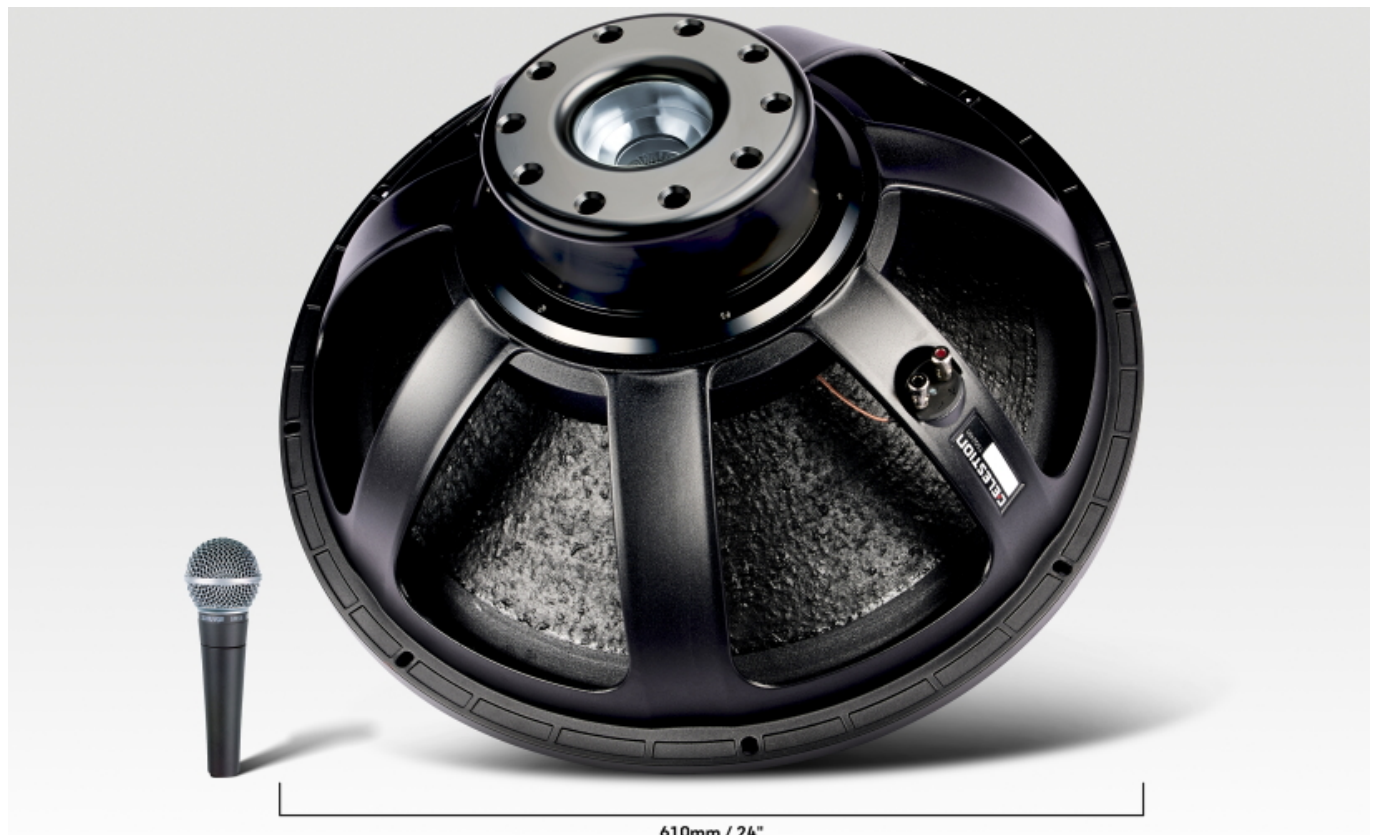


Celestion TSQ2460



Celestion, a manufacturer of professional loudspeakers and compression drivers for sound reinforcement applications, announces the availability of the flagship 24" TSQ2460. The new 24-inch neodymium magnet low-frequency driver sits atop the revolutionary Ten Squared (Ten2) Series. The TSQ Series was born out of a specialist development program created at Celestion's R&D facility in Suffolk, England, which sought to refine various aspects of large-format PA loudspeaker design and production. This program focused not just on peak performance but on maintaining that performance throughout the speaker's entire lifespan - even after years of use. The TSQ2460 delivers a groundbreaking combination of power handling, excursion control, and durability alongside outstanding audio reproduction, fulfilling the need for uncompromising and consistently superior performance in demanding sound reinforcement applications. The driver is meticulously designed for use in high-output subwoofers, or as a bass unit in large format line arrays and two- or three-way loudspeaker systems.

The TSQ2460 features an impressive 4800W continuous power rating and achieves 98dB sensitivity. Its high-power handling capability, among other performance achievements, are intrinsically tied to its 6-inch (152 mm) diameter round copper voice coil, supported by an aluminium chassis, combined with the driver's advanced magnet cooling technology. At the heart of the Ten Squared philosophy is the commitment to superior longevity and reduced thermal stress. A critical area of

focus was voice coil temperature regulation. Celestion's goal became to significantly lower voice coil temperatures, which directly correlates with higher power handling and, just as importantly, driver and high-performance longevity.

The TSQ2460 utilises the Precision Tuned Venting (PTV) system - a three-channel system that ensures constant, highly efficient cooling across the frequency band. This advanced temperature control is a crucial differentiator, enabling the voice coil to operate at temperatures typically up to 80° C lower than competing drivers in this class. Further enhancing thermal performance is a proprietary coil structure featuring custom winding done in-house at Celestion. Our voice coils use a hybrid multilayer, inside/outside methodology, using proprietary adhesives and adhesive application methods. This approach maximises cooling potential by exposing the greatest surface area to free air, synergistically combining with PTV to achieve significant reduction of power compression and thermal stress, further enhancing lifespan.

The TSQ2460 is constructed to maintain performance integrity even during maximum cone excursion and hundreds of hours of use. The system employs a Reconfigured Magnet Assembly that allows for substantially greater cone excursion and a remarkably high Xprotection level. This capability works in tandem with the driver's unique Polysiloxane Laminated Dual/Triple Suspension design, which takes advantage of a new process that optimises the laminates' application method and polymer density between suspension rings and prevents the suspension system from losing stiffness under heavy loads, thus increasing speaker longevity and improving cone displacement symmetry. This careful mechanical engineering ensures that the electrical motor strength (BI) and mechanical compliance (CMS) reach their defined Xprotection limit at virtually the same point, resulting in consistently low distortion performance even during high excursion.

Durability features complete the package addressing common points of failure in high-power LF drivers. Lead-out wires are protected from motion-induced fatigue ("whipping") by being precision woven through laser-cauterised holes in the suspension. The driver is protected against the elements through a double-sided, water-resistant coating applied to the cone material, enhancing durability and offering protection against water and humidity. The TSQ2460, like the companion TSQ models (the 21" TSQ2145 and 18" TSQ1845), is built on the new state-of-the-art robotic production line at Celestion's UK facility, representing a culmination of the company's 100-plus years of loudspeaker engineering expertise.

"The Ten Squared Series reflects Celestion's unwavering commitment to excellence over the last one hundred years," commented Paul Cork, Celestion Head of Engineering. "The flagship TSQ2460, with its unprecedented 4800W continuous power rating and speaker longevity enhancements throughout, doesn't just raise the bar - it redefines the standards of performance and durability, setting a new benchmark for professional low-frequency audio. It's a testament to our dedication to delivering superior audio solutions for the most demanding sound reinforcement applications, today and for years to come". The TSQ2460 is available now.

Celestion announces the 24-Inch Driver TSQ2460

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www.celestion.com