
ACOUSTICS
Concept 300

Uncompromised Performance, Understated Elegance

Since its founding in 2006, Q Acoustics has built an unrivalled reputation for designing, engineering and manufacturing innovative, high-performance and class-leading loudspeakers at every price-point. This ongoing and concerted demonstration of excellence has all led to Concept 300.

The brief for Concept 300 is simple, yet staggeringly ambitious: to build on the runaway success of the floorstanding Concept 500 and deliver a standmounting alternative that's at once more affordable, of utterly uncompromised performance and of stylish, understated elegance.

There follows a brief explanation of just how Q Acoustics has made this happen and, by extension, why Concept 300 represents the state of loudspeaker art in the 21st century.

This combination of rigorous engineering, uncompromised industrial design and aspirational aesthetics makes Concept 300 the most fully realised loudspeaker Q Acoustics has yet delivered. In combination with the equally meticulous Tensegrity stand, Concept 300 not only advances loudspeaker performance at its price, it also represents a redefinition of the relationship between a loudspeaker and its support.

Rigorous Engineering, Uncompromised Industrial Design

Ideally, the only vibrations a loudspeaker produces are the ones required to accurately reproduce sound. Of course, it's not possible to entirely rid a loudspeaker cabinet of unwanted vibrations that can interfere with its performance, however using a combination of the most innovative speaker technology alongside specially designed Tensegrity stands, utilising a wealth of its own technology, Q Acoustics are confident you will hear your music, the way it was intended.

Black and Rosewood

Silver and Ebony

White and Oak

Extraordinarily Elegant; Two Become One

The design, build and finish of Concept 300 is as sophisticated and high-quality as the sound itself.

The dual-finish cabinet is designed to interact comfortably with any interior decor vocabulary while maintaining the Q Acoustics' clean, contemporary design language. Concept 300 combines real wood veneers with multiple gloss lacquer coats to produce three stunning finishes: Black and Rosewood, Silver and Ebony, or White and Oak.

With a standmount speaker like this, the relationship with its stand is of fundamental importance. Introducing a Tensegrity stand, and the new Isolation Base suspension system that joins Concept 300 to it has allowed Q Acoustics to redefine the level of performance that's possible from a smaller loudspeaker, as well as being strikingly beautiful.

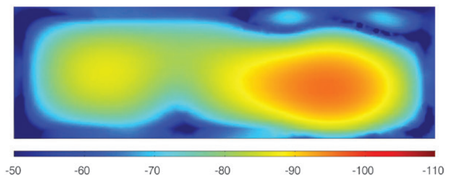
Leading Technology, Pioneering Innovation

The striking Concept 300 speakers host a wealth of technology, not only those that have secured Concept 500s place as an extraordinary floorstanding loudspeaker, but new innovations resulting in the purest sound Q Acoustics have achieved from any standmounted speaker yet.

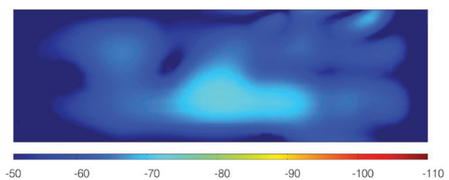
Point 2 Point™ Bracing

Using Finite Element Analysis and laser interferometry to examine the performance of the cabinet down to a microscopic level, P2P™ bracing has been applied to the speaker cabinet.

Using this state-of-the-art technology, Q Acoustics have been able to identify and apply bracing to only the precise points of the cabinet that require additional support and unwanted energy is dissipated rather than transferred throughout the cabinet.



Conventional Bracing
Heat map showing unbraced wall velocity dispersion

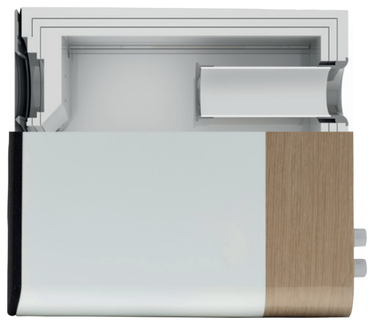


Point 2 Point™ Bracing
Heat map showing cabinet wall velocity with P2P™ Bracing

Dual Gelcore™

The Concept 300 speakers utilise Dual Gelcore technology. Gelcore first appeared in Q Acoustics' acclaimed Concept 20 and Concept 40 loudspeakers, before evolving into Dual Gelcore™ for Concept 500. Concept 300 brings this cutting-edge technology to a standmount speaker.

The cabinet is comprised of three individual layers - the gaps between each are completely filled, under pressure, by a compliant form of non-setting gel. The two constrained layers convert higher-frequency vibration into heat, which dissipates within the damping gel reducing higher frequency cabinet vibrations in an ultra quiet cabinet construction.



Isolation Base Suspension System

A standmounted speaker's relationship with its stand is of fundamental importance. In the first instance, rigidly coupling a cabinet to a stand using spikes hugely increases the intensity of transmitted vibrational energy, while at the same time transmitting vibrations present in the floor into the cabinet.

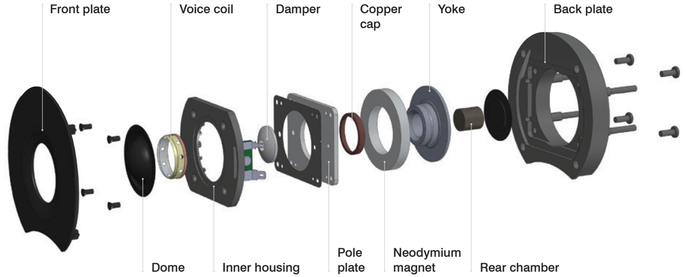
Q Acoustics has solved this problem by developing and fitting an integral base plate, called Isolation Base, which forms the bottom of the Concept 300 cabinet.

The entire mass of the speaker is thus suspended on four springs, which are damped using a special material called Sylodamp™. This material, precisely tailored to the mass of the speaker converts any vibrational energy in the springs into heat and acts as a completely rigid coupling system.

As a result, bass response is extended and becomes tighter. Stereo imaging is improved at the same time.

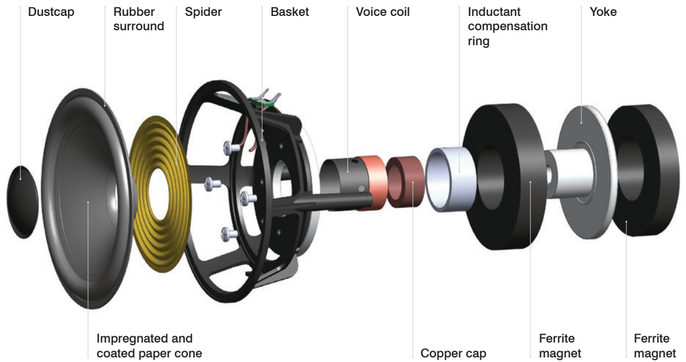
High-Frequency Driver Unit

The Concept 300 tweeter is decoupled from the speaker cabinet using a rubber gasket. This prevents the tweeter sending or receiving unwanted vibrations, and allows it to be mounted close to the mid-bass driver. This improves integration with the larger driver and the very subtle horn-shaped profile to the tweeter's front plate allows perfect impedance-matching with its environment without colouring performance.



Mid/Bass Driver

The mid/bass driver is a 165mm impregnated/coated paper cone with very low resonance thanks to its high-performance, low-hysteresis rubber surround. It utilises an even larger magnet than the Concept 500 equivalent, better to cope with the special demands of a single driver in a relatively small cabinet.



Tensegrity Stands

Tensegrity is a self-supporting structure, made up of elements either in compression or tension, but never subject to bending force. This stunning structure has been specifically designed for the Concept 300 standmount speakers and consist of load-bearing, low-profile solid stainless steel bars to form a tripod - an inherently stable structure which can be levelled by moving just one of the feet. Thin stainless-steel cables define and maintain the spatial orientation of the legs.

Unlike solid MDF or tubular steel stands, Tensegrity has an extremely low surface area, which reduces re-radiated sound to virtually nil. It's less a speaker stand, more an entirely new loudspeaker support concept.

Thanks to the combination of the Tensegrity stand and the Isolation Base suspension system, the performance of Concept 300 is entirely unhindered by influences from within or without.

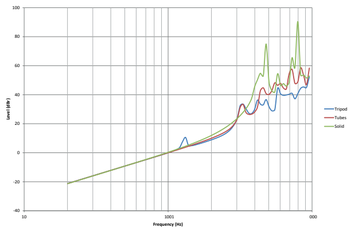
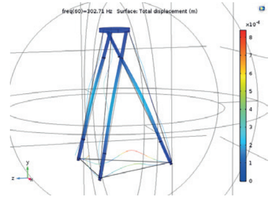
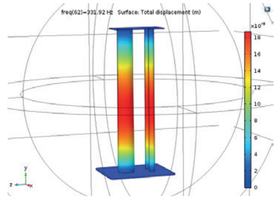


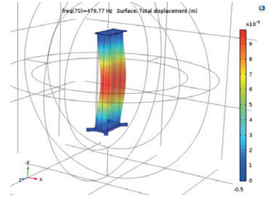
Figure 5. Normalised in-room acoustic power measurement for loudspeaker stands



Total displacement
Tensegrity Stand



Total displacement
Tube Stand



Total displacement
Solid Stand

Outstanding Results

With a combination of P2P™ bracing and Dual Gelcore™ construction, cabinet resonances have been reduced to negligible levels. The introduction of the Isolation Base acoustic suspension system combined with the new Tensegrity stand provides a very low resonance and reflection-free stand mount system for the first time ever.

This scientific engineering approach to control cabinet resonance has resulted in a real 30dB improvement in signal-to-noise ratio across the board, or looking at it more simply, that's a lot more music and a lot less noise and distortion.

We recognise that the choice of a loudspeaker is always a personal one, with system matching, room acoustics and personal taste all playing an important role but we feel that the Concept 300 is easily good enough to be included in anyone's audition shortlist.

Specifications

	Concept 300 Speaker	Concept 300 Tensegrity Stand
Enclosure type	2 way reflex	-
Mid/Bass Driver	165mm	-
High Frequency Unit	28mm	-
Frequency Response (-6dB)	55 Hz - 30 kHz	-
Nominal Impedance	6 Ω	-
Minimum Impedance	4.7 Ω	-
Sensitivity	84 dB/W/m	-
Stereo Amplifier Power	25-200 W	-
Crossover Frequency	2.5 kHz	-
Effective Volume	11.4 L	-
Dimensions W/H/D	220 x 355 x 400mm	492 x 690 x 430mm
Weight	14.5kg (per speaker)	3.9 kg (per stand)
Carton Dimensions W/H/D	320 x 500 x 520mm	740 x 780 x 460mm
Packaged Weight	16.6kg (per speaker)	12.3 kg (pair)

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