







To the cognoscenti of British high-performance audio,

The Wilson Benesch marque is recognised as a world-leading loudspeaker and turntable design and manufacturer. The driving force behind the Wilson Benesch brand is fundamentally a deep passion for music and engineering.

Music is an art form. From sound to silence, a simple, single instrument, to a full orchestra, music is capable of transforming, uplifting and emotionally stirring us like perhaps no other art form. Music is a global language; it transcends age, ethnicity, culture, and class. Music has been central to our culture since the dawn of humankind, spanning our evolution. It is capable of joining us with our ancestors, describing human development, documenting our progress and reflecting perhaps most faithfully the human condition according to time. In every sense, it is a collaborative document of humanity that can be transformed, sampled, improvised and referenced according to the generation of the time.

Our mission is to enable access to this art form, revealing every detail, nuance and timbre of the recorded artist. Through an iterative process of design, underpinned by highly ambitious research and development programs, Wilson Benesch engineers' products that put you closer to the music than ever before.

The new flagship 'Fibonacci Series' from Wilson Benesch showcases the pinnacle of the company's extensive research and development. More than three decades of exhaustive work in the fields of carbon fibre composites evolves into the next generation with the introduction of biocomposite materials technology. Faithful to the unique way in which Wilson Benesch has funded and achieved innovation since its foundation in 1989, the new biocomposite materials and the 'A.C.T. 3Zero Monocoque' that they form have been developed through collaboration with centres of excellence, Universities and other SMEs from across Europe.

The advanced materials science, manufacturing technologies and drive unit design is distilled into half a dozen unique products. The nomenclature of the series and the products derive their names from the forms used to generate each component's architecture, each speaker in the range is presented to the very highest level of fit and finish. Designed, machined and assembled entirely inhouse at Wilson Benesch, each speaker excels in delivering dynamic, detailed but natural sound, rich with layered timbre and all the vivid information of the recorded arts.

Craig Milnes, Design Director

Christina Milnes, Managing Director





# A.C.T. 3Zero Monocoque

// Next-Generation Advanced Composite Technology

The Fibonacci Series introduces a full line of loudspeakers from the Wilson Benesch brand that are built from the new A.C.T. 3Zero biocomposite Monocoque. The new monocoque marks significant advances not only in terms of the acoustic performance of the Wilson Benesch reference line, but it also represents a deliberate and conscious move toward natural, renewable and sustainable materials technology.

// Sustainable Structural & Multifunctional Bicomposites from Hybrid Natural Fibres & Bio-Based Polymers – SSUCHY

The world's first 'Green Loudspeaker' is just one of numerous deliverables that were the ambition of the pan-European 'SSUCHY Project' which began in 2017. The European Union's 'Horizon 2020' invested €7.4 million to enable 13 Universities, 4 SME's and several Blue-Chip companies to come together, collaborate and innovate. The objective was to deliver cutting edge science and materials technologies required by the circular economy – with the mission to replace oil-based non-recyclable materials or in effect deliver next-generation materials technology.

## // Decades of Pioneering Work

In 1994 the A.C.T. One loudspeaker disrupted the audio market. The curved carbon composite flanks, sloping top and metal baffle were radically different from the wooden enclosures of the day. The A.C.T. One loudspeaker was based upon the same honeycomb Nomex core and skins of Carbon Fibre prepreg that had been researched and used in the development of the Wilson Benesch Turntable.

In 1999, P.E.R.A. International collaborated with Wilson Benesch to enable the company to commit to investing in Resin Transfer Moulding (RTM) manufacturing technologies. Wilson Benesch was one of four organisations to pioneer this process in the United Kingdom. The successful results paved the way for the development of the Odyssey Range which was launched in 2001. Thanks to the continual reinvestment of profits made by the company, the move to Vacuum based systems or VRTM soon followed and in 2011 the Geometry Series was launched. Wilson Benesch's proven track record of successful collaborative R&D project outcomes and manufacturing excellence was central to the invitation for Wilson Benesch to become a partner in the SSUCHY Project.

## // Next Generation Performance

SSUCHY brought together scientists from across Europe who are at the very forefront of developments in their field. Together with applied engineering expertise, it has been possible to accelerate work that would have taken decades for even the largest of companies. The scientific understanding of how the materials behave at the microscopic level has been validated by measurements of the actual materials. The outcome for Wilson Benesch is the new A.C.T. 3Zero Monocoque. Wilson Benesch named the monocoque as a reference to the more than three decades since the foundation of the company and the beginning of research and development within the field of advanced composite technologies. The new A.C.T. 3Zero Monocoque is the largest single component in the Wilson Benesch loudspeaker enclosure, and it is at the heart of the new Fibonacci Series loudspeakers. During the development of the monocoque, Wilson Benesch worked closely with its project partner the FEMTO Institue in Besancon France. The FEMTO Institute would drive forward with testing and verification, with Wilson Benesch using the

advanced manufacturing facilities within its factory to create new monocoques with different layups and resins before sending these back to France. The data provided independently by the FEMTO Institue shows that in terms of both stiffness and damping, the new A.C.T. 3Zero monocoque delivers significant (orders of magnitude) superior performance than the previous generation A.C.T. Monocoque.

the Eminence is in many ways the least colored and lowest distortion speaker I've heard. It is a step forward in realizing the ideal of a transparent window on the music. This transparency to the source isn't limited to transparency in the usual sense of the word — the "see-through" quality associated with soundstaging — but also transparency to the music's dynamics, pitch, timing, timbre, and most importantly, expression."

- Robert Harley, The Absolute Sound Magazine

## // Natural Materials, Sustainable Source & Recyclable

The A.C.T. 3Zero Monocoque is constructed from natural materials that are both renewable and sustainable. Through a collaborative effort with our partners, an exhaustive list of materials and hybridised structural layups were analysed, tested, and evaluated. The resulting biocomposite monocoque is almost entirely free of oil-based material use. Even the resin that the previous generation carbon fibre monocoque used has been replaced with a Bio-Resin.

Manufacturing is an energy-intensive process, so as part of the SSUCHY Project, the manufacturing process has also been refined and optimised. Wilson Benesch's Vacuum Resin Transfer Moulding (VRTM) manufacturing systems have been fully upgraded to the State-of-the-Art. Thanks to rigorous testing and development using Finite Element Analysis (FEA), the SSUCHY Team have been able to model and determine optimal resin flow and other critical settings for the VRTM systems. This means that the new A.C.T. 3Zero Monocoque at the heart of the Omnium now requires just half the energy that was used to produce the previous generation monocoque.

Sustainability has been at the forefront of the company's business plan for some years, but as a direct result of the SSUCHY Project, the outcomes can be truly described as transformational. The SSUCHY project team has been able to not only meet the aims and objectives set out in the original Project Plan, but to also go well beyond this to achieve market-ready finished parts."

Craig Milnes, Design Director, Wilson Benesch

// Read the full report from the SSUCHY Project. Click here.

The Eminence's tweeter is a superb transducer. It produces a treble that is smoother and more liquid than that of most hard domes, lacking the touch of metallic glare that can plague titanium and even beryllium domes. At the same time, the Eminence's tweeter gives up nothing in resolution and speed. The result is a top end that is richly detailed and alive, yet not etched or overbearing. The treble was beautifully integrated with the rest of the spectrum, with no hint of it being a separate component riding on top of the music, rather than an extension of the same sonic fabric." Robert Harley – The Absolute Sound



## FIBONACCI TWEETER

In 2012, Wilson Benesch introduced its first tweeter the Semisphere. The Semisphere was a wide bandwidth tweeter capable of reproducing a frequency band from 5kHz - 30kHz. The Semisphere was unique in that it achieved this wide-bandwidth output from a soft silk dome technology. The key advantage of soft-dome tweeters is the absence of sibilant high-frequency hardness in the sound. Plus the absence of complex breakup modes that hard dome tweeters are commonly affected by. No tweeter with a silk dome structure had been able to achieve output beyond 18-22kHz before the Semisphere and it was the addition of a high precision carbon fibre arch spanning the orthogonal axis of the silk dome to create a hybridised structure that achieved this. The hybridised dome at the heart of the Semisphere was a world first. The design highlighted our understanding of composite materials technology, specifically the need for damping as well as high specific stiffness in audio structures.

## // Fibonacci Element

The latest iteration of Wilson Benesch tweeter technology builds upon the Semisphere tweeter design pushing it into the next generation. As with all Wilson Benesch designs, the advances of the previous generation are built upon an iterative research and development pathway. With the Fibonacci tweeter, advances have been made within the structures adjacent to the motor and the hybridised dome. The Fibonacci tweeter faceplate is formed from a carbon fibre – nylon composite structure creating a geometrically optimised structure – the Fibonacci Element – that has been inspired by sacred geometry found in nature. In terms of acoustic performance, the faceplate delivers a new benchmark in terms of flat frequency response and ultrawide dispersion. In addition, the Fibonacci Element is decoupled from the motor and tweeter chassis which almost entirely eliminates structural borne resonance within this critical structure that surrounds the tweeter dome.

## // Labyrinth Element

At the rear chamber of the Fibonacci tweeter, Wilson Benesch has introduced the Labyrinth Element. Labyrinth has been developed using the very latest 3D computer-aided design technology that now enables the software to take human modelling and ideas and then apply an algorithm to the design that will further optimise the structures according to those found within nature – biomimicry. Biomimicry is the science of applying nature-inspired designs in human engineering and invention to solve human problems and it is what gave rise to the Labyrinth and the Fibonacci Elements. The complex structure that can be observed in the rear chamber of the Fibonacci tweeter is designed to trap sound wave energy arriving at the rear chamber of the tweeter during sound replay, cancelling the sound energy as it arrives. This reduces the phenomenon known as "back-wave" or simply out-of-phase reflected sound energy that would otherwise either cancel, time smear or enhance the output of the tweeter.

Wilson Benesch added additive manufacturing systems to the company's manufacturing capability in 2017. Since then a broad range of applications has been realised. The Fibonacci Element pays homage to the Italian 12th-century mathematician. This type of development would have been impossible until only very recently. Additive manufacturing has opened up a new arena of design opportunities that Wilson Benesch has been exploring for over seven years and is now exploiting in a broad range of new developments. The unique acoustic signature of the Fibonacci tweeter is unique. Its success owes much to the innovation of the original Semisphere. It is these small steps that Wilson Benesch will continue to take as an innovator and advanced materials manufacturer that will enable the small but significant accumulative benefits of ongoing research and development.

# TACTIC 3.0 DRIVE UNIT

Underpinning the Wilson Benesch design philosophy is science; both within engineering and the application of the basic physical laws that govern the universe. Since the foundation of the company in 1989, advanced materials technology has consistently formed the basis of our extensive research and development programmes.

## // Isotactic Polypropylene

This understanding of science, together with the advances made in materials technology and manufacturing through research - has informed genuine innovation within our product development for more than 30-years. The Tactic 3.0 is a great example of the outcomes of this approach. Nowhere can the concerns for balance in both stiffness and damping be better seen than in the material used in the diaphragm of the drive unit.

When subjected to audio frequencies a drive unit diaphragm moves in and out to create sound waves at different frequencies that we perceive as music. However the timbre, quality and clarity of the sound produced have a direct relationship to the material used to create the sound.

Wilson Benesch started development of its own drive unit diaphragms, including those made from a carbon fibre/epoxy matrix in 1995. Research was conducted using alternative hard dome materials. Without exception, Isotactic Polypropylene was favoured for its natural sound and the ability of this material to absorb energy and avoiding complex breakup modes in the diaphragm. This critical material characteristic allows the Wilson Benesch design team to achieve mechanically and acoustically what would otherwise be implemented in complex crossover designs with a series of inductors and capacitors. This reductive approach to crossover design maintains phase, linearity and the degree of control over manufacturing and design of both the drive unit specifications and the enclosure air volume allows Wilson Benesch to eliminate all crossover components in the midrange drive units of most Fibonacci Series models running the drive unit directly amplifier coupled.

## // Fibonacci Element & The Tactic 3.0

The structure at the centre of the diaphragm plays a critical role in the behaviour of the drive unit. Commonly referred to as the "dust cap", the name understates the importance of this component. In the Tactic 3.0, Wilson Benesch added the Fibonacci Element.

Produced in house using additive manufacturing technology, the Fibonacci Element can be printed according to pre-designed parameters. Such is the precision of the additive manufacturing software, that the Wilson Benesch design team can see in cross-section and design three-dimensionally the optimal layup of carbon fibre and nylon, defining both stiffness and weight across the structure. The result is a new geometrical form that is comprised of a double curvature with both open and closed aspects in the form of a lattice structure again borrowed from natural geometry. 5 different materials and adhesives provide significant improvements in both the accuracy of the frequency response and the reduction of distortion.

This is a critical aspect of the relationship between the drive unit and its ability to integrate with the roll off of the tweeter and bass drive units. In the past, several materials have been drawn upon to enable the fine-tuning of this marriage. Additive Manufacturing has opened up a new chapter in the pursuit of this subtle but extremely important aspect of loudspeaker design. For the first time, the principal aspects of this structure can all be adjusted in a way that was previously impossible.



## "

The two 7" woofers you see at the bottom of the baffle are mated to identical drivers inside the cabinet that you don't see, with their cones facing each other. As the two facing drivers move together, the woofer you hear (the one you see on the baffle) doesn't have to contend with the springiness of the air inside the enclosure, as occurs with all other loading techniques. Indeed, "isobaric" means "equal pressure," and isobaric loading is technically known as a "constant-pressure chamber" configuration... Listening to music through the Eminence was a startling experience. It reproduced certain aspects of the music in a way that I've never heard from any loudspeaker—dynamic, planar, or horn-loaded.

.... It's not just that initial transients are lightning fast, or that the decays are equally quick—which they are. That alone would have been noteworthy for a dynamic loudspeaker (this quality comes naturally to planar designs). But what puts the Eminence's dynamic performance in a class of its own is the total and utter coherence of this transient fidelity from the lowest bass to the treble. The Eminence speaks with one voice dynamically, with exactly zero discontinuity along the frequency spectrum. Frankly, the Eminence makes most other speakers sound slow and thick in the bass."

### - ROBERT HARLEY, EDITOR-IN-CHIEF, THE ABSOLUTE SOUND



# ISOBARIC DRIVE SYSTEM

The principal low-frequency load of all loudspeakers in the Fibonacci Series is delivered by the Isobaric Drive System. Here two Tactic 3.0 Drive Units combine to create an Isobaric Drive System. The Isotactic Drive System is responsible for reproducing an incredibly tight and controlled bass response that is perfectly integrated with all other woofers in the loudspeaker chassis, particularly the midrange Tactic 3.0 drive unit.

There are no transient delays in nature. So it should come as no surprise, that transducers that exhibit the fastest transient response come closer to reproducing natural sound more accurately. This has been a guiding principle in all Wilson Benesch drive unit development. The basic Laws of Physics dictate that a large woofer will never function with the speed and dynamics of a small drive unit. It is for this reason that Wilson Benesch ruled out the idea of using large, slow woofers in loudspeaker design. Such drive units cannot accelerate or decelerate quickly enough to reproduce the sound and energy of a musical performance faithfully.

The key advantages of isobarically loaded drivers are summarised below,

- Super stiff / super low mass diaphragm. The air link between the two diaphragms can be seen as a composite structure with outstanding stiffness to weight ratios.
- Smaller Enclosure Holes. First of all, imagine a conventional large cone loudspeaker design. Now remove from the design the diaphragm and imagine now what you see. A large hole. This is a window for out of phase sound within the enclosure to escape into the listening space. By retaining smaller drive units the size of the holes in the enclosure is reduced as much as possible.
- Increased stiffness in the enclosure. By reducing the size of the holes in front of the enclosure, the amount of material removed from the structure is reduced and therefore stiffness can be maintained within the enclosure.
- The drive unit that you hear, has no spring effect on it. The drive unit inside the enclosure moves all aspects of the air volume and so the spring effect. The drive unit you hear sees only a single pressure the same as free space. The resonant frequency is as a result, very low. This low resonant frequency could only be achieved in a conventional system by adding mass, at least double. The consequence is a total loss of dynamics and transient performance. Much has been written about the integration of sound between drive units.
- Large drive units are inherently unresponsive. You cannot accelerate and decelerate a large heavy car like you can a small lightweight car. By combining powerful rare earth NdFeb magnets with lightweight small cones, the Isobaric Drive System has both power and low weight, resulting in industry benchmark step-response and therefore seamless integration with the midrange drive units.

## DISCOVERY 3Zero

## STANDMOUNT LOUDSPEAKER

The third generation of a Wilson Benesch classic. The original 'Discovery' name was a reference to the development of the unique acoustic presentation that the first Discovery loudspeaker delivered when it was launched in 2002. A 2.5-way standmount monitor like no other, the Discovery 3Zero deploys the same unique drive topology as the original classic, placing the Fibonacci Tweeter and a dedicated Tactic 3.0 midrange drive unit in close proximity to the powerful Isobaric Drive System that sits directly on the underside of the loudspeaker in the vertical plane. With all drive technologies placed within a few inches of one another, time alignment and integration across the Discovery 3Zero frequency band is unmatched. The Discovery 3Zero delivers a lightning-fast, punchy, highly accurate and endlessly captivating presentation.

"...virtually every element in the speaker, from the cabinet and drivers to the spikes and terminals, is manufactured in-house, giving the company complete control of form, function, consistency and tolerance."

- ROY GREGORY, THEAUDIOBEAT.COM

DRIVE TECHNOLOGY	CROSSOVER TECHNOLOGY	Poly-Alloy, 'A.C.T. 3Zero' Monocoque, Biocomposite Enclosure with Visco-Elastic interfaces throughout, 13mm thick Steel Ties in the Vertical Axis	
Midrange - 170mm (7") Tactic 3.0	First Order, 5kHz Low Pass Filter	Reflex Port Tuned	
Tweeter - 25mm (1") Fibonacci Hybrid Silk-Carbon Tweeter	Second Order, 5kHz Low Pass Filter	Sealed Tweeter with 'Labyrinth Element'	
Isobaric Drive System - 2x 170mm Tactic 3.0 (Clamshell)	First Order, 500Hz Low Pass Filter	Reflex Port Tuned	
MEASUREMENTS		DIMENSIONS	
TYPE	2.5-Way	HEIGHT	1187 mm (46.7")
IMPEDANCE	6 Ohms Nominal / 4 Ohms Minimal	WIDTH	187 mm (7.4") Baffle, 394 mm (15.5") Widest point of the foot
SENSITIVITY	89dB @ 1-Meter on axis, 2.83V Input	DEPTH	408 mm (16.1")
FREQUENCY RESPONSE	38Hz - 30kHz +/- 2dB	WEIGHT	35.5kg (78.26lbs) Stand is integrated with the Enclosure



# A.C.T. 3Zero FLOORSTANDING LOUDSPEAKER

A.C.T. - 'Advanced Composite Technology' - a reference to the composite technologies upon which the Wilson Benesch brand was founded and subsequently has become synonymous with. The A.C.T. acronym was first used in 1991 for the company's first loudspeaker, the A.C.T. One. The technology was subsequently used in the 'A.C.T. Two', the 'A.C.T.', the 'A.C.T. C60' and in the previous generation A.C.T. One Evolution. The new A.C.T. 3Zero, therefore, follows a long line of speakers, embodying the heritage of the Wilson Benesch brand and the classic A.C.T. design.

Similar physical proportions have been retained, however, the A.C.T. 3Zero marks a significant advance in the materials that are used to create the composite monocoque that forms the largest single component in any Fibonacci Series loudspeaker. The new biocomposite A.C.T. 3Zero Monocoque is made from naturally sourced, renewable and sustainable materials replacing almost all materials previously used that had been sourced from petrochemical sources. In terms of performance, the new monocoque is superior to its predecessor both in terms of damping and stiffness, leaving the new upgraded drive technologies free from cabinet colouration to deliver a new reference from the A.C.T. marquee.

The new A.C.T. 3Zero also marks the first time in history that an A.C.T. loudspeaker has been fitted with an Isobaric Drive System. The new A.C.T. 3Zero incorporates the IDS within the elegant, highly engineered three-part foot. Joining the Isobaric is a low-bass Tactic 3.0, the new Fibonacci Tweeter and a dedicated Tactic 3.0 midrange drive unit which is directly amplifier coupled. This reductive approach to crossover design eliminates phase anomalies and aberrations associated with complex crossovers, creating the shortest and purest signal pathway possible. This approach to design can be heard when you listen to a Wilson Benesch loudspeaker, the natural acoustic character, multi-layered detailed but natural timbre and the deep but integrated soundstage from the top to the bottom of the frequency band.

DRIVE TECHNOLOGY	CROSSOVER TECHNOLOGY	ENCLOSURE TECHNOLOGY		
		Poly-Alloy, 'A.C.T. 3Zero' Monocoque, Biocomposite Enclosure with Visco-Elastic interfaces throughout, 'thick Steel Ties in the Vertical Axis		
Upper Midrange - 170mm (7") Tactic 3.0	TBC	TBC		
Tweeter - 25mm (1") Fibonacci Hybrid Silk-Carbon Tweeter	Second Order, 5kHz Low Pass Filter	Sealed Tweeter with 'Labyrinth Element'		
Lower Midrange - 170mm (7") Tactic 3.0	TBC	TBC		
Isobaric Drive System - 2x 170mm Tactic 3.0 (Clamshell)	TBC	TBC		
MEASUREMENTS		DIMENSIONS		
TYPE	TBC	HEIGHT	TBC	
IMPEDANCE	TBC	WIDTH	TBC	
SENSITIVITY	TBC	DEPTH	TBC	
FREQUENCY RESPONSE	TBC	WEIGHT	TBC	



Pictured: PREMIUM PAINT FINISH // PHANTOM BELLADONNA PURPLE



Pictured: PREMIUM NATURAL WOOD FINISH // WALNUT GLOSS

# ENDEAVOUR FLAGSHIP STANDMOUNT LOUDSPEAKER

Since its foundation, Wilson Benesch has invested heavily in ambitious research and development projects in the fields of materials science and manufacturing. The Endeavour 3Zero exploits more than three decades of work, to distil a multitude of cutting-edge Wilson Benesch technologies in its flagship standmount loudspeaker design.

The Endeavour 3Zero builds upon the Discovery 3Zero, adding additional air volume in a larger enclosure that adds more drive and composure to the larger of the two siblings.

Like the smaller Discovery 3Zero, the Endeavour 3Zero places the Fibonacci hybrid dome Tweeter directly at the acoustic centre of bass and midrange drivers. The sonic delivery is perfectly poised, tonally balanced, natural-sounding and seamlessly integrated. Listening to the Endeavour 3Zero is an affirmational experience.

Through expert design, craftsmanship, the deployment of advanced materials technology and geometrically optimised componentry, Wilson Benesch has created a stand mount loudspeaker design with no compromise. The Endeavour 3Zero faithfully reproduces the musical ensemble, as though the performers were there in the room before you.

DRIVE TECHNOLOGY	CROSSOVER TECHNOLOGY	ENCLOSURE TECHNOLOGY		
		Poly-Alloy, 'A.C.T. 3Zero' Monocoque, Biocomposite Enclosure with Visco-Elastic interfaces throughout, 13mm thick Steel Ties in the Vertical Axis		
Midrange - 170mm (7") Tactic 3.0	First Order, 5kHz Low Pass Filter	Reflex Port Tuned		
Tweeter - 25mm (1") Fibonacci Hybrid Silk-Carbon Tweeter	Second Order, 5kHz Low Pass Filter	Sealed Tweeter with 'Labyrinth Element'		
Isobaric Drive System - 2x 170mm Tactic 3.0 (Clamshell)	First Order, 500Hz Low Pass Filter	Reflex Port Tuned		
MEASUREMENTS		DIMENSIONS		
TYPE	2.5-Way	HEIGHT	1425 mm (56.1")	
IMPEDANCE	6 Ohms Nominal / 4 Ohms Minimal	WIDTH	191 mm (7.5") Baffle, 526 mm (20.7") Widest point of the foot	
SENSITIVITY	89dB @ 1-Meter on axis, 2.83V Input	DEPTH	480 mm (18.9")	
FREQUENCY RESPONSE	38Hz - 30kHz +/- 2dB	WEIGHT	75kg (165.35lbs) Stand is integrated with the Enclosure	



# RESOLUTION FLOORSTANDING LOUDSPEAKER

Drawing on the DNA of the A.C.T.3Zero and Endeavour 3Zero, Resolution 3Zero deploys technologies such as the Isobaric Drive System, the acoustic centring of the tweeter and midrange drivers, and a sculptured curved sloping carbon composite top and the A.C.T. 3Zero biocomposite Monocoque - but it places this technology in a full range floorstanding enclosure. The results are superlative!

Resolution 3Zero is a high-octane listening experience - capable of delivering impressive drive, power and scale, whilst also retaining complete composure thanks to the Wilson Benesch drive technologies and the A.C.T. 3Zero biocomposite monocoque. But whilst the Resolution 3Zero is capable of sonic acrobatics, it is also (as its name would suggest) capable of resolving micro harmonics and delicate passages within the recorded arts - performing a disappearing act within the soundstage - such that the listener is always at one with the music and the artist.

The foundation of everything is the perfectly integrated bass delivery. In this respect, the Resolution 3Zero deploys two Isobaric Drive System, plus a low-bass driver at the top of its enclosure. The step response of the Isobaric Drive System matches that of the midrange drive units, ensuring perfect phase coherence across the frequency band.

Placed directly at the centre of the Resolution 3Zero, the Tactic 3.0 midrange together with the Fibonacci Tweeter directly above it, forms the acoustic centre. As with the A.C.T. 3Zero, the Tactic 3.0 midrange drive unit is acoustically rolled-off with no crossover within its signal path to the amplifier, this optimises the performance through this critical frequency band allowing the midrange drive unit to deliver a perfectly natural midrange presentation.

The Resolution 3Zero is a formidable floorstanding loudspeaker. It defies what is commonly thought to be possible from a large enclosure by delivering power with absolute control and finesse. A tough act to follow.

DRIVE TECHNOLOGY	CROSSOVER TECHNOLOGY	ENCLOSURE TECHN	OLOGY	
		Poly-Alloy, 'A.C.T. 3Zero' Monocoque, Biocomposite Enclosure with Visco-Elastic interfaces throughout, 13m thick Steel Ties in the Vertical Axis		
Low Bass - 170mm (7") Tactic 3.0	First Order	Infinite Baffle		
Tweeter - 25mm (1") Fibonacci Hybrid Silk-Carbon Tweeter	Second Order, 5kHz Low Pass Filter	Sealed Tweeter with 'Labyrinth Element'		
Midrange - 170mm (7") Tactic 3.0	First Order, 5kHz Low Pass Filter	Infinite Baffle		
Isobaric Drive System 1 - 2x 170mm Tactic 3.0 (Clamshell)	First Order 500Hz Low Pass Filter	Bass Reflex Port underside of the loudspeaker foot		
Isobaric Drive System 2 - 2x 170mm Tactic 3.0 (Clamshell)				
MEASUREMENTS		DIMENSIONS		
TYPE	2-Way Electric, 4-Way Acoustic	HEIGHT	1558mm (61.34")	
IMPEDANCE	6 Ohms Nominal / 3 Ohms Minimal	WIDTH	191mm (7.5") Baffle, 519mm (20.43") Widest Point Foot	
SENSITIVITY	90dB @ 1-Meter on axis, 2.83V Input	DEPTH	505mm (19.88")	
FREQUENCY RESPONSE	30Hz - 30kHz +/- 2dB	WEIGHT	98kg (216lbs)	





The Omnium is a celebration of the "modular design" that Wilson Benesch added to its design philosophy when it released the ground-breaking Odyssey Range in 2001. With each new design, the modular design approach builds upon the subtle lessons of its predecessor. Like the Porsche 911, the Omnium is then not a singular design, but rather the latest evolution of a living lineage – more than 30-years of incremental improvement in the pursuit of genuine world-class audio reproduction. It is this heritage that can be seen to have honed every single detail of the new Omnium loudspeaker.

Omnium - from the Latin "of all"

The name Omnium was chosen in recognition of this landmark, the name means of all, and it is a reference to the heritage of three decades of research and development that has come before it. Whilst the Omnium references all that has come before it, it is also a product that marks the dawn of the next generation of materials technologies developed through a collaborative research and development project – SSUCHY.

The stepped features seen in the Omnium's foot are a reference to its larger sibling the Eminence. Hewn in house by Wilson Benesch from a single billet of aluminium to reduce an 80kg solid billet of aluminium by more than half, to create a single 38kg Omnium loudspeaker foot. This formidable component governs over the energy above by way of the 14mm tie bolts that generate a metric ton of compressive pressure through the Omnium enclosure. This is the foundation, ground zero and arbiter of performance.

Omnium stands boldly as the industry-leading design in this market sector from the pioneers and leaders in composite loudspeaker design.

DRIVE TECHNOLOGY	CROSSOVER TECHNOLOGY	ENCLOSURE TECHNOLOGY	
		Poly-Alloy, 'A.C.T. 3Zero' Monocoque, Biocomposite Enclosur Visco-Elastic interfaces throughout, 13mm thick Steel Ties in Vertical Axis	
Upper Bass 1 - 170mm (7") Tactic 3.0	First Order	Infinite Baffle	
Upper Bass 2 - 170mm (7") Tactic 3.0			
Tweeter - 25mm (1") Fibonacci Hybrid Silk-Carbon Tweeter	Second Order, 5kHz Low Pass Filter	Sealed Tweeter with 'Labyrinth' Chamber	
Midrange - 170mm (7") Tactic 3.0	First Order, 5kHz Low Pass Filter	Infinite Baffle	
Low Bass 1 - 170mm (7") Tactic 3.0	First Order	Infinite Baffle	
Isobaric Drive System 1 - 2x 170mm Tactic 3.0 (Clamshell)	First Order 500Hz Low Pass Filter	Infinite Baffle	
Isobaric Drive System 2 - 2x 170mm Tactic 3.0 (Clamshell)			
MEASUREMENTS		DIMENSIONS	
TYPE	2.5-Way	HEIGHT	1720mm (67.7")
IMPEDANCE	4.5 Ohms Nominal	WIDTH	205 mm (8.1") Baffle, 594mm (23.39") Widest Point Foot
SENSITIVITY	89dB @ 1-Meter on axis, 2.83V Input	DEPTH	624 mm (24.6")
FREQUENCY RESPONSE	27Hz - 30kHz +/- 2dB	WEIGHT	140 kg (308.65 lbs) Ships as two Enclosures.

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The Wilson Benesch Eminence is a different kind of speaker. Its engineering is unique; its appearance is idiosyncratic; and it sounds unlike other world-class loudspeakers. In the ability to convey music's dynamic expression, rhythmic flow, and timing, the Eminence is simply unequaled. These are important, and often overlooked, qualities of musical realism. Hearing music's transient nature reproduced accurately is startling, and drives home the fact that virtually all other dynamic loudspeakers act like a dynamic filter between you and the music."-ROBERT HARLEY, EDITOR IN CHIEF, THE ABSOLUTE SOUND





## **EMINENCE**

## FLAGSHIP FLOORSTANDING LOUDSPEAKER

In 2018 Wilson Benesch unveiled Eminence - the most ambitious loudspeaker design in the company's three-decade history. The Eminence became a messenger for the next generation of reference Wilson Benesch loudspeaker design, introducing for the first time the A.C.T. 3Zero Monocoque, the Tactic 3.0 drive unit and the Fibonacci Tweeter. The Eminence quickly received acclaim from the most important critics in the industry and without exception, it was identified as a landmark achievement not only for the brand but within high-end audio design.

The Eminence is the brand and series flagship, but this loudspeaker is not simply about scale; it is a remarkable achievement in product design, integrating seamlessly its 10x drive units with stunning coherency in such a way that allows the loudspeaker to disappear effortlessly into the listening space leaving only the recorded artist and the listener - an amazing achievement for a product that is physically taller than most of the audience to which it plays. But the Eminence also sets a new benchmark in terms of materials and responsible product design - signalling a clear direction of travel toward renewable and sustainable solutions - a baton that as the leader in high-end audio product design and manufacturing Wilson Benesch is taking up and pioneering into the future.



GOLDEN EAR AWARD 2019



PRODUCT OF THE YEAR 2020



EDITORS CHOICE AWARD 2020



EDITORS CHOICE AWARD 2022

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DRIVE TECHNOLOGY	CROSSOVER TECHNOLOGY	ENCLOSURE TECHNOLOGY	
		Poly-Alloy, 'A.C.T. 3Zero' Monocoque, Biocomposite Enclosure with Visco-Elastic interfaces throughout, 13 thick Steel Ties in the Vertical Axis	
Upper Bass 1 - 170mm (7") Tactic 3.0	First Order	Infinite Baffle	
Upper Bass 2 - 170mm (7") Tactic 3.0			
Tweeter - 25mm (1") Fibonacci Hybrid Silk-Carbon Tweeter	Second Order, 5kHz Low Pass Filter	Sealed Tweeter with 'Labyrinth' Chamber	
Midrange - 170mm (7") Tactic 3.0	First Order, 5kHz Low Pass Filter	Infinite Baffle	
Low Bass 1 - 170mm (7") Tactic 3.0	First Order	Infinite Baffle	
Low Bass 2 - 170mm (7") Tactic 3.0			
Isobaric Drive System 1 - 2x 170mm Tactic 3.0 (Clamshell)	First Order 500Hz Low Pass Filter	Infinite Baffle	
Isobaric Drive System 2 - 2x 170mm Tactic 3.0 (Clamshell)			
MEASUREMENTS		DIMENSIONS	
TYPE	2.5-Way	HEIGHT	1905mm (75")
IMPEDANCE	4.5 Ohms Nominal	WIDTH	205mm (8.1") Baffle, 613 mm (24.1") Widest Point Foot
SENSITIVITY	89dB @ 1-Meter on axis, 2.83V Input	DEPTH	624 mm (24.6")
FREQUENCY RESPONSE	24Hz - 30kHz +/- 2dB	WEIGHT	145 kg (320 lbs) Ships as one

# LUXURIOUS FINISHING

### STANDARD FINISH

Luxurious 'Textured Black' powder coated finishing is available as standard across the Fibonacci Series. All finishing is completed to an exceptional luxury automotive standard close to the Wilson Benesch factory in the U.K.

## PREMIUM NATURAL WOOD FINISHES

Wilson Benesch apply book matched real wood veneers by hand in its factory in Sheffield. All veeners are individually selected by our expert finishing technitians, who are in turn the very same technitians who lay up the veneers, lacquer and polish them. The high gloss natural wood veneers on a Wilson Benesch meet and exceed the very highest standards creating a truly bespoke and unique product.

### PREMIUM P1 CARBON FIBRE FINISHES

Introduced in 2015 - the P1 concept introduces a coloured carbon fibre weave and matching colour accents in the top plate and on some models the grille mesh. Developed by British F1 engineers, the 'P1' carbon collection was afforded the acronym to denote position 1 and each finish afforded a name which celebrates motor racing history.

### PREMIUM PAINT FINISHES

A new introduction with the Fibonacci Series. The Premium Paint finishes are complex, multiple-layer finishes taken directly from the world's most famous luxury automotive marquees - the finish names are a reference to these. Expertly applied close to the Wilson Benesch factory in England, the new Premium Paint finishes allow the Wilson Benesch owner to craft a bespoke product that matches the other cherished products within their life.

### ISOBARIC DRIVE SYSTEM FINISHES

On those models that feature the Isobaric Drive System there is an optional finish upgrade on the drive unit motor backplate. This creates a truly bespoke and unique finish. The standard finish is Textured Black.

All Wilson Benesch finishes can be viewed or downloaded digitally. Click here to view.

Or visit our website and view our finishes via our product pages. Click here to visit Wilson Benesch.



PRODUCT FINISHES



WEBSITE



Pictured: PREMIUM FINISH // GOLD ISOBARIC DRIVE SYSTEM



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