

COVER FEATURE

ATC EL50 Anniversary Edition

A Seamless Transition Between Audio and Space

Text | Chung Kai-Yuen

ATC, which stands for Acoustic Transducer Company, became widely renowned following the release of their extraordinary 12-inch bass driver, the PA75-314, in 1974. The introduction of the SM75-150S dome midrange driver in 1976 cemented their stellar reputation worldwide. This iconic midrange unit has remained a staple in various ATC loudspeaker models ever since, primarily because of its exceptionally broad frequency response (**380 Hz – 3.8 kHz**), highly uniform sound dispersion, and extremely low distortion. It completely revolutionized studio monitoring standards at the time and stands as a vital milestone in ATC's history.

This history proves that while ATC's loudspeaker systems are passionately adored by professional recording studios and audiophiles alike, the company has also consistently excelled in the research, development, and manufacturing of specialized premium drive units. Therefore, to truly understand the ATC EL50 Anniversary Edition—which is strictly limited to just 50 pairs worldwide—it is best to start by analyzing its drivers step-by-step to comprehensively evaluate this masterpiece.

Soft Dome Tweeter and Midrange Drivers

The ATC EL50 Anniversary employs a 3-way bass reflex design. Its soft dome midrange unit is the latest optimized version of the SM75-150S, which took the industry by storm upon its debut 50 years ago. Together with the 25mm tweeter and 234mm woofer, these three drivers each bring their own unique advantages to the system.

First, the legendary "Monster Dome" SM75-150S features a massive 75mm voice coil. One of its standout characteristics is the use of a 3.5mm short voice coil operating within a long magnetic gap structure, which effectively produces a **6 mm** peak-to-peak linear excursion. To eliminate diaphragm rocking and instability, ATC implemented a specialized dual-spider architecture in the voice coil assembly. This minimizes wobble and substantially raises the accuracy of sound reproduction. Furthermore, the SH25-76S tweeter utilizes a unique dual-suspension structure that guides the moving coil assembly in a perfectly linear axial trajectory. The added stability provided by this dual suspension allows the tweeter to deliver effortless high-frequency extension with incredibly low distortion, entirely eliminating the need for ferrofluid in the magnetic gap. Consequently, the gap can be

narrowed to boost power handling efficiency, and users never have to worry about performance degradation caused by ferrofluid drying out over long-term use.

| The Perfect Partnership with the Custom Amp-Pack

The SB75-234SL bass driver is built using ATC's proprietary Super Linear Magnet technology. Designed specifically to eliminate the negative impacts of magnetic hysteresis distortion on cone movement, this 234mm cone driver incorporates Super Linear Magnetic Material (SLMM) through proprietary processing techniques. This specialized formulation suppresses eddy currents, managing to reduce third-harmonic distortion by an astonishing **15 dB**. This dramatically elevates low-frequency clarity and yields flawless synergy with the SM75-150S midrange driver.

To extract the absolute peak performance from these three vertically integrated in-house drivers, the active EL50 Anniversary houses a patented 3-channel active "Amp-Pack". It features a balanced input stage, user-configurable control interface, and a precise active electronic crossover. Three independent power amplifiers supply continuous power directly to the drivers: 200W for the bass, 100W for the midrange, and 50W for the treble. Because every circuit module is developed and manufactured completely in-house by ATC, quality is meticulously controlled, realizing a highly faithful, uncompromising active loudspeaker system.

| A Fully Integrated Active Loudspeaker System

The brand-new discrete gain modules engineered specifically for the EL50 Anniversary are seamlessly integrated into a balanced input system and a 4th-order electronic crossover, optimized for ultra-low distortion and an exceptionally quiet noise floor. In addition, the power supply architecture has been extensively upgraded, utilizing independent toroidal transformers for each amplifier channel alongside a separate transformer dedicated to low-voltage control circuits. This topology enhances dynamic headroom under demanding conditions and reduces interchannel intermodulation distortion, providing the listener with remarkably clear and detailed sonics.

The built-in electronics also introduce several highly practical operational enhancements, including user-selectable input sensitivity, remote power triggering, and continuous monitoring systems for thermal status and DC offset to guarantee bulletproof reliability and prevent any risk of overheating or component faults.

| Cabinet Design Inspired by the Legendary EL150

The striking elliptical cabinet silhouette of the ATC EL50 Anniversary is crafted using intricate multi-layer curved laminates, high-precision CNC machining, and meticulous hand-finishing. Its unique shape is explicitly engineered to minimize acoustic diffraction and cabinet-borne distortions in the mid-to-high frequencies. This guarantees that the acoustic wavefront flows seamlessly from the drive units into the room. The curved front baffle and smoothly contoured edges allow sound waves to propagate smoothly without harsh edge refractions, yielding a balanced on-

axis and off-axis frequency response. This translates into a perfectly natural, three-dimensional soundstage with pinpoint imaging.

Achieving this standard is possible because modern-day ATC controls every aspect of production. Beyond manufacturing their own drivers and electronics, they operate their own state-of-the-art cabinetry facility. Their toolset includes a Klippel Near Field Scanner (an automated 3D acoustic measurement system) and fully automated SMT surface-mount assembly lines. Melding advanced manufacturing equipment with traditional British craftsmanship allows ATC to keep every single critical component firmly under internal control, forging a unified, high-performing anniversary product that is exceptionally trustworthy.

Impeccable Engineering and Execution

The unique elliptical cabinet structure is extraordinarily difficult to fabricate. Technical Sales Manager Ben Lilly notes that in addition to the rigorous standards of their internal cabinet shop, ATC collaborates with specialist partners utilizing advanced 5-axis digital CNC systems to machine the enclosures, establishing a new paradigm for structural precision. At the same time, the surface-mount electronics allow the tri-amplifiers and electronic crossovers to be tightly packaged, preserving an internal volume of over 50 liters. This generous volume enables the low frequencies to achieve deeper extension. The precise 4th-order electronic crossover ensures that each driver operates strictly within its designated passband, keeping bass frequencies out of the midrange to prevent muddy acoustic overlap and maintain a beautifully flat frequency response. Throughout its development, the design was continuously refined using Klippel Near Field Scanner robotics to resolve cabinet resonances and dispersion anomalies, ensuring absolute purity and clean, authoritative transient delivery.

ATC EL50 Anniversary Specifications	
Frequency Response	32 Hz - 25 kHz (-6 dB)
Maximum SPL	112 dB (per pair @ 1m)
Configuration	3-Way Bass Reflex Active
Crossover Frequencies	380 Hz / 3.5 kHz (4th-Order)
LF Amplifier Output	200 W (8Ω, 0.1% THD)
MF Amplifier Output	100 W (16Ω, 0.1% THD)
HF Amplifier Output	50 W (8Ω, 0.1% THD)
Dimensions (H x W x D)	1421 x 459 x 352 mm
Weight	63 kg per speaker
Retail Price	HK\$555,000
General Distributor	Sound Concepts Ltd.

A Different Kind of ATC

The EL50 Anniversary Loudspeaker System

Text | Tai Chup

As an audiophile who has been deeply immersed in high-end audio for over 40 years, I have witnessed how Hong Kong—a relatively small city—has managed to cultivate an incredibly large and sophisticated community of audio enthusiasts. The sheer number of discerning listeners with high standards rivals any major metropolitan area in Europe or America. Coupled with passionate, knowledgeable distributors who operate magnificent, state-of-the-art showrooms, Hong Kong has naturally become a premier global hub where the world's finest audio brands rush to establish themselves.

Over the decades, I have observed a fascinating phenomenon in our local market: certain historic brands or products accumulate an intensely loyal following due to their unique acoustic signature, stellar performance, robust build quality, and constant technological evolution—all while maintaining fair and rational pricing. Audiophiles looking to upgrade their systems almost invariably choose higher-tier models from the exact same brand. In the realm of compact monitors, the licensed BBC LS3/5A stands supreme. When it comes to electronics, Japan's Accuphase (founded in 1972) is a definitive favorite. And when it comes to world-class loudspeakers, I believe the absolute representative brand is none other than ATC.

| An Unwavering Loyalty

ATC was founded in Gloucestershire in 1974 by acoustic engineer Billy Woodman. Initially, the primary business focused on designing and manufacturing ultra-high-performance drive units for the professional audio sector, capable of handling extreme sound pressure levels with wide bandwidth and ultra-low distortion. At inception, the 12-inch PA75-314 woofer and the 3-inch SM75-150S soft dome midrange became instant sensations due to their peerless performance. They were widely integrated into top-tier studio monitors and universally recognized as gold standards. Naturally, Billy Woodman transitioned into developing complete loudspeaker lines. To address evolving market needs, he pioneered active designs incorporating internal line-level electronic crossovers and dedicated power amplifier modules, finding massive success in both professional and consumer audio markets. For many audiophiles, an ATC speaker is synonymous with explosive dynamics, stunning midrange presence, high resolution, and superb refinement, all wrapped in traditional British cabinet-making excellence. They offer outstanding value across their entire line, ensuring that their users remain fiercely loyal over generations.

Flawless and Complete Performance

I share a deep personal history with ATC. Over thirty years ago, I visited Billy Woodman at his factory in Gloucestershire, and I was a proud owner of the SCM50 in piano black for many years. Furthermore, when ATC introduced its previous flagship elliptical active system—the EL150—in 2008, the Hong Kong distributor hosted a magnificent product launch at the Eaton Hotel, and I had the absolute privilege of co-hosting the presentation stage alongside Billy Woodman himself, who flew out from the UK specifically for the event.

Anyone familiar with ATC knows that nearly all of their speakers, whether bookshelf or floorstanding, are strictly rectangular boxes. The EL150 was the first model to shatter this convention with a striking, horizontally oriented elliptical cabinet profile, offered in both active and passive configurations. Today, in 2026, ATC has introduced its second-ever elliptical masterpiece: the EL50 Anniversary. It is about two sizes more compact than the EL150, and its woofer size has been scaled from 15 inches down to 9 inches. However, the level of craftsmanship, wood-veneering, and lacquer polishing is visibly more intricate, luxurious, and beautiful. Describing it as absolutely flawless is by no means an exaggeration. Because of its sleeker, more graceful footprint, the EL50 is incredibly easy to accommodate in domestic living spaces, boasting a width of only around 18 inches. Being an active design with three built-in amplifier modules per side, setup is elegantly simple. I spent over a month with it in our main listening room, and frankly speaking, its transcendent performance completely justifies its HK\$555,000 price tag.

The Perfect Fusion of Reason and Art

A Definitive Audition of the EL50 Anniversary

Text | Joey

The most captivating aspect of the ATC EL50 Anniversary is not an intentional pursuit of superficial eccentricity. Instead, it takes ATC's core strengths—absolute accuracy, ultra-low distortion, high dynamic expression, and supreme driver control—and envelops them in an elegant aesthetic layout that commands a proud presence in any domestic space. It does not attempt to catch your eye with aggressive or garish design language; rather, it stands as a tour de force where engineering rationality and artistic beauty reach their absolute zeniths.

The cabinet form inherits the legacy of the EL150 designed by founder Billy Woodman back in 2006: a classic 3-way layout, custom internal drivers, an active tri-amplified architecture, an elegant curved profile, premium Nappa leather accents, and perfectly matched European walnut veneers. The finishing is noticeably more sophisticated than previous models, bridging the gap between ATC's studio monitoring bloodline and high-end residential luxury. The intent is clear: ATC did not merely set out to create a great-sounding high-end loudspeaker; they wanted to build the ultimate reference instrument that can serve faithfully in a home for decades while blending seamlessly into sophisticated interiors.

| Composed, Authoritative, and Highly Refined

For our evaluation, we utilized the Esoteric Grandioso N1 as our primary digital source, feeding into the Dan D'Agostino Momentum C2 preamplifier, which directly drove the EL50 Anniversary. The elegant, minimalist advantage of a fully active system was instantly apparent. We began by spinning Norah Jones' classic track, "Come Away With Me". This sparse, elegant arrangement serves as an excellent test for authentic vocal reproduction.

The EL50 excelled immediately by granting Norah's voice a tangible physical form and weight. It never artificially projects the performance into the listener's face; instead, she stands naturally within a three-dimensional soundstage with realistic height and physical presence. Every articulation, breath, trailing note, and even the subtle, delicate texture of her vocal cords are fully resolved within a solid, exceptionally clear outline—intricate yet completely unexaggerated. Crucially, the EL50 avoids the common trap of over-sweetening or artificially smoothing vocals. While many speakers gloss over fine textures to sound pretty, the EL50 displays mature restraint, maintaining a perfect spatial distance between the vocalist, the piano, and the double bass. Coupled with the crystalline transparency of the Esoteric Grandioso N1, the vocal placement is rock-solid, delivering a performance that is profoundly convincing in its realism.

Unfettered Grandeur and Precise Order

We then transitioned to the **Carmen Ballet Suite**, performed by the Boston Pops Orchestra under the baton of Arthur Fiedler. In the face of a massive orchestral arrangement, the EL50 Anniversary showcased impeccable structural integrity and organization. The placement of brass and woodwinds was pinpoint accurate, with the entire soundstage unfurling naturally across both horizontal and vertical planes. It avoids inflating the stage dimensions artificially, choosing instead to anchor the orchestral weight firmly and precisely, rendering complex layerings completely transparent. During the dramatic crescendo of "IX. Toreador", the EL50 effortlessly organized the massive acoustic energy rather than letting it spill out into chaotic noise. Even at intense high-volume peaks, it maintains spectacular density and tension without ever sounding bright, harsh, or out of control. Scale and micro-detail coexist harmoniously, creating a spectacular listening experience that honors the musical composition rather than degrading into a mere demonstration of sound pressure. For an active system that prides itself on precision, playing **Carmen** with such magnificent grandeur and perfect composure is a definitive testament to its world-class capability.

Playing Mahler: Who Else?

The Definitive Symphonic Monitor

Text | Kelvin

"To reproduce Mahler, who else but ATC?" This iconic slogan was a cornerstone of ATC's legendary advertisements. Two decades ago, when I began discovering and falling deeply in love with Gustav Mahler's expansive symphonies, ATC was immediately at the top of my list when looking to upgrade my loudspeakers. I distinctly remember auditioning the SCM100 at the distributor's showroom; they played *Noye's Fludde*, and that boundless soundstage combined with the terrifying authority of the "Voice of God" left an indelible mark on my soul. Recently, ATC introduced the EL50 Anniversary Edition—limited to a mere 50 pairs worldwide. When one of these rare pairs materialized in our review studio, there was absolutely no way I was going to miss out on this audition.

Walking into the listening room, my eyes were instantly drawn to the EL50. In person, its finish is significantly more lustrous and striking than any photograph can convey. As a fully active system, we paired it with the Dan D'Agostino Momentum preamplifier and a flagship CH Precision digital playback system. Without wasting a single moment, I pulled out my favorite reference disc from my backpack: Mahler's *Symphony No. 2 "Resurrection"*, specifically the live 1992 recording of Claudio Abbado conducting the Vienna Philharmonic (DG 439 953-2). The Second Symphony is one of Mahler's grandest and most theatrical compositions, spanning five movements that weave together full orchestra, massive choruses, and soloists to explore profound themes of life, death, redemption, and eternity. The orchestral forces required are immense; in addition to the packed stage, Mahler calls for offstage brass and percussion (horns, trumpets, timpani, bass drum, cymbals, triangle) to generate a three-dimensional sense of immense distance. As Mahler famously stated: "A symphony must be like the world. It must embrace everything." For an audiophile, this piece contains every high-fidelity test imaginable. To reproduce it correctly is a monumental challenge.

An Absolute Master of Dynamics and Scale

Faced with massive dynamic swings, the EL50 Anniversary remained completely unbothered, demonstrating absolute composure even under extreme sound pressure levels. It stands firm and resolute, showing zero signs of confusion or congestion when the entire orchestra erupts in a full-scale fortissimo. The physical positioning, separation, and tonal textures of every instrument group are delivered with absolute clarity. While these explosive tuttis are thrilling, they only occupy a small portion of the symphony. It was the calm, subterranean passages that

truly gave me goosebumps. The EL50's ability to transition from an ultra-faint, delicate whisper of micro-detail to a terrifying sonic explosion exemplifies the absolute meaning of linear, low-distortion performance.

Thanks to its incredibly wide frequency response, the extension at both frequency extremes is state-of-the-art. Whether it was the crystal-clear, shimmering ring of a triangle or the brilliant, piercing cry of the brass section, everything sounded remarkably transparent and lifelike. Meanwhile, the double basses and concert bass drums unleashed deep, subterranean lows that maintained flawless pitch, texture, and contour, almost as if an invisible subwoofer array had been seamlessly integrated into the room. The soundstage was another magnificent triumph. Even though our studio is not infinitely large, the EL50 projected an immense spatial field; you could clearly hear the offstage instruments performing from deep behind the back wall, creating an incredibly realistic, layered three-dimensional illusion. Monitor speakers are not universally loved because their neutral, unvarnished character puts the full burden of emotional connection entirely onto the quality of the performance and recording. The final half-hour of the **Resurrection** symphony, with its soaring vocal soloists and massive choir, is deeply moving if you understand the text; but even if you do not know a single word, the sheer musical authority delivered by the EL50 will shake you to your core.

Listening to both discs straight through for 87 minutes was an absolute joy. When it comes to reproducing Mahler, the old slogan still holds absolute truth: **Who else but ATC?**