

WHITE PAPER

TRAPEZE

Reimagined



AUDIOVECTOR

Feel the Music

THE TRAPEZE REIMAGINED

A new angle on audio perfection

1979. And Ole Klifoth launches the Trapeze - his very first commercial speaker. Back then, a 3-way linear phase speaker with every driver in positive polarity was completely revolutionary.

"I wanted to recreate the kind of sound I experienced in Tivoli's Concert Hall, 13th row, middle, from where I could take in both the overview and the details. Or in Jazzhus Montmartre, sitting about 3-4 metres from the musicians."

The Trapeze laid the groundwork for all Audiovector speakers to come, including the pioneering focus on linear dynamics and linear phase through a true 6 dB per octave crossover.

"I loved the atmosphere of the jazz club. I found out that I couldn't find a speaker that could reproduce all of this. That's when I decided - because I was young and adventurous and didn't know if it was impossible - that it should be my project."

FAST FORWARD 45 YEARS

The new Trapeze Reimagined is based on the same principles as the original heritage model. Yet it has been brought breathtakingly up to date with the very best, most innovative technology available.

A homage to the company's very first loudspeaker. The embodiment of 45 years of passion, innovation, and love of music. And quite simply, a thing of beauty. As a 3-way floor standing design, the Trapeze Reimagined features a 12-inch high-power mid/bass driver. A 5-inch-high speed midrange. And a purpose designed Audiovector SEC Air Motion Transformer (AMT) tweeter.

The three drivers combine to deliver a flat and, above all, even power response - matching the famous Brûel & Kjaer ideal room response, which has always represented a significant goal of our engineering. As with all Audiovector models, the Trapeze Reimagined is designed as a home-friendly loudspeaker. The low frequency tuning is designed to bring weight and drama to any music – as well as beauty and atmosphere to any room.

THE ICONIC 'LOPSIDED' CABINET

Standing waves are an enemy of perfect sound. The Trapeze Reimagined incorporates a number of design techniques to create a cabinet that effectively eliminates them. The acoustic centres of each driver are aligned to make sure the pure 6 dB/octave technology functions exactly as it should. The speaker is angled toward the listener yet remains parallel to the back wall, adding a subtle dash of timeless elegance to any room. The Trapeze Reimagined goes far beyond the sound, representing timeless Danish design that never goes out of style.

The cabinet itself is crafted from hardwood high density board, hand veneered for an uncompromising fit and finish, and generously braced for low distortion and colouration.

COLOURS AND VENEERS

We exclusively use carefully selected real wood veneers and offer a wide variety of custom finishes painted in Denmark. The black cloth grille is included as standard, with custom piano colours available on request.

SOUND PERSPECTIVE AND REPRODUCTION OF THE MUSICAL SCENERY

Although far from the ubiquitous shape of conventional slim cabinets, the Trapeze Reimagined excels in transporting the listener to the atmospheric heart of a live event, as close as possible to the stage and the performers. We achieve this sensation by placing a diffraction absorbing felt area around the treble and midrange drivers, which helps to create a rare and natural soundstage.

THE AUDIOVECTOR SEC AMT

The only AMT with sufficient membrane control. The only AMT with controlled rear radiation. We believe that our open back AMT-tweeter is the only one of its kind that stays true to the original design from Dr. Oscar Heil.

The pleated membrane is in a league of its own, featuring an extremely light and well controlled mylar membrane with aluminium leading strips to form a light and dead structure.

Exceptional internal damping results in particularly low distortion. We have even developed a special etching process to produce a diaphragm configuration, which was then optimized over a significant number of tests. The extremely strong N 51 Neodymium magnets provide excellent acceleration and control.

The 3-point installation of the drivers virtually eliminates the energy transfer between the cabinet and the driver, minimising their influence on each other. The fascia plate of the AMT is milled from aircraft grade aluminium, with the natural aluminium colour enhanced by a delicate circular milling pattern.

Think an AMT works like a ribbon tweeter? Think again. The decent horizontal dispersion of a ribbon tweeter contrasts with a narrow vertical dispersion. Not so with the AMT, which will not change in sound if you move up and down in front of it. As far as our measurement equipment – and our ears – are concerned, the AMT principle is by far the best solution for treble reproduction.

HIGH PERFORMANCE 5-INCH MIDRANGE DRIVER

An AMT of this quality deserves a fast midrange driver to match it.

The Trapeze Reimagined midrange driver uses a light, impregnated paper cone with a hysteresis-free voice coil. A copper induction shorting cap on the pole piece offers extra speed and improved linearity. The edge-termination is not a rubber half roll surround, but rather a speed optimised 'concertina' surround. This plays a key role in the excellent midrange reproduction.

And finally, the chassis is built from a combination of aluminium and magnesium, with the magnet a supremely strong vented circular Neodymium magnet.

PROPRIETARY 12-INCH BASS DRIVER

Just like the AMT, the in-house design of the Trapeze Reimagined bass driver is custom made to our exact - and exacting - specifications.

The membrane is a light and stiff long fibre paper membrane. The 4" hysteresis-free voice coil is fully vented for no air traps - as is the aluminium/magnesium chassis. And the 'concertina' corrugated surround provides as much speed and detail as possible. Crossing over to the midrange at 500 Hz, it matches the detailing of the midrange.

The extremely low distortion of the 12-inch bass driver allows unusually natural and dynamic vocals, as well as a beautifully rich sound without boom or bloom that just sounds so right.

8-INCH COMPOUND 'ISOBARIC' DRIVER

As you might imagine, we have also designed and engineered the compound driver. It works with the 12-inch driver to couple the masses of the two drivers together. The advantage of such a carefully tuned bass reflex solution is an unheard-of combination of weight and speed to the sound.

UNIQUELY FLEXIBLE DAMPING FEATURE

A unique feature provides the Trapeze Reimagined with an unmatched degree of flexibility when it comes to matching the damping factors of different amplifiers.

- **Position 1: For transistor amplifiers with medium damping factor.**
- **Position 2: For high power transistor amps with a high damping factor.**
- **Position 3: For tube amps with a low damping factor.**

As always, it is wise to listen carefully and select the best position for your system.

ROOM INTEGRATION

The Trapeze Reimagined has been designed to adapt to a typical range of rooms. No problems with bass, midrange, or treble. Just an open, rich, musical, and rhythmic reproduction of all kinds of music in all kinds of settings.

PROPRIETARY CROSSOVER TECHNOLOGY

As you would expect, our unique in-house crossover incorporates the highest quality components. The double cryogenically treated capacitors combine polypropylene dielectrics with a tin-flashed copper foil to create the most musical sound. Although they state a variance of +/- 2%, in reality the figure is matched to less than +/- 0.3%.

Our distortion optimised copper coils are produced to the same rigorous standards.

And we stopped at nothing to preserve the delicate treble tones. Not only do we use an array of film resistors, in contrast to the reactive wire wound resistors found in the majority of loudspeakers. We have also added an Audiovector X Duelund bypass capacitor to preserve the highest and most delicate frequencies, which we do not hear directly but rather as a part of the signal.

FREEDOM GROUNDING CONCEPT

Audiovector Freedom is a new and revolutionary grounding technology designed to address the movement induced distortion of and between the drive units in a loudspeaker. The currents running between the chassis are processed and managed by a new separate crossover, which routes the signal to the ground terminal of your wall socket or your grounded mains distribution unit.

Contrary to conventional knowledge, these currents cause coloration and distortion between the drive units. By balancing and filtering them through a dedicated separate filter, and by offering the possibility of connecting the speakers to earth/ground, we achieve a clean, very accurate, and significantly more realistic sound with a low noise floor.

DOUBLE MECHANICAL DECOUPLING

The Trapeze Reimagined includes an elaborate 2-layer aluminum plinth. This efficiently decouples the cabinet from the floor, using carbon steel bearing balls between the two layers to control the transmission of residual resonances. The total assembly is efficiently coupled to the floor via precision CNC machined spikes sitting on Floor Protection Unit discs. The net result is a clean and open presentation of transients and of soundstage height, width and depth.

SPECIFICATIONS	FREQUENCY RESPONSE	AVERAGE IMPEDANCE	MINIMUM IMPEDANCE	SENSITIVITY
TRAPEZE REIMAGINED	23 Hz – 53 kHz	8 Ohm	6.5 Ohm at 20 kHz	88 dB SPL at 1m for 2.83Vrms input

SPECIFICATIONS	DISTORTION	CROSSOVER FREQUENCIES	BASS UNIT	MID UNIT	HF UNIT
TRAPEZE REIMAGINED	<0.2% THD at 90 dB SPL	500 and 3.000 Hz	High Power 12-inch with 4" Voice coil	High resolution 5" Neodymium	3800 mm2 Audiovector SEC AMT

SPECIFICATIONS	TERMINALS	DIMENSIONS	WEIGHT	FINISH
TRAPEZE REIMAGINED	High Current Gold-plated copper/ brass binding posts for 4mm plugs or spades	875 mm x 420 mm x 435 mm (H x B x D)	Approximately 50 kilos pr. pair.	Nordic Oak, Italian Walnut, Black Ash, White Silk

THANK YOU FOR YOUR INTEREST
BEST REGARDS



OLE KLIFOTH
FOUNDER



MADS KLIFOTH
CEO

www.audiovector.com

Audiovector · Mileparken 22 A · DK-2740 Skovlunde · Denmark · mail@audiovector.com · Phone +45 3539 6060

© Audiovector is a registered trademark