





Alpair 5 Gen. 3

The Alpair 5 Generation 3 is a revised version of our celebrated 2nd generation Alpair 5. For this updated model, the circular copper-clad aluminium (CCAW) voice coil of the 2nd generation model has been replaced with a high purity rectangular profile copper winding. This new coil provides better damping of high frequencies for a similar mass, and gives a slightly warmer, more natural treble while maintaining the exceptional micro-detail the Alpair 5 is famous for.

With Thiele / Small parameters optimised for flexibility and ease of use, and treble response that extends to 25KHz, the Alpair 5 Generation 3 has a detailed, balanced and neutral sound reproduction across an ultra-wide frequency range for this class of small driver. It is easy to use and versatile, well-suited to use with higher-end compact enclosures. A typical bass-reflex with an internal volume of 3 litres can be tuned to below 80Hz. For larger budgets, it is ideal for high-end line array applications.

The Alpair 5 Generation 3 is a pure single suspension full-range audio driver: its only suspension is the advanced inverse roll front-surround. This retains designer Mark Fenlon's classical mechanical engineering approach to reducing mass and extend long-throw operating capacity. Mark, with Evan Yu and the engineering team spent several months of research removing mechanical restriction from the ultra-thin coil body. Traditional driver designs use a "spider": a suspension device located behind the driver's cone. Bonded to the coil, spiders physically restrict the coil's ability to transfer mechanical signals to the cone. Some other drivers use damping fluid, springs or other devices, all of which produce losses. The Alpair 5 Generation 3, like the previous model, completely removes all these restrictions; its coil locates cleanly between the driver's cone and motor sub-assembly, making it a pure free-to-air mechanical design. The accuracy requirement for component design, engineering and detailed assembly goes well beyond typical commercial audio-driver manufacturing. The front suspension operating tolerance is measured in milli-newtons. Production Alpair 5 Generation 3 drivers, like the early Generation 2 model, are made to within +/- 2.5Hz @ F-Zero. All production units are then pair matched to with +/- 1Hz @ F Zero.











FS 94.5428 Hz VAS 1.7845 L RE 3.4000 Ohm

QMS 2.301

QES 0.6366

QTS 0.4986

Bxl 2.4921

dBSPL85.4477 SD 0.0028 m2

CMS 1.5986 mm/N

MMS 1.9328g

RMS 0.4459

MMD 1.8477 g

L1k 0.0399 mH Pwr 5 Watts Nom

X Max (Mech) +/-3mm

39±0.5 -- 6±0.2