

Mark Fenlon's Alpair 7



Extended Full Range audio driver

The Alpair 7 is a rare (possibly unique) driver in this size and class. Its primary feature is its extended high range out to 30-kHz which eliminates the need for a tweeter. The driver achieves this performance without using a whizzer or co-axial centre tweeter. The Alpair 7 is a purist single cone/cap design.

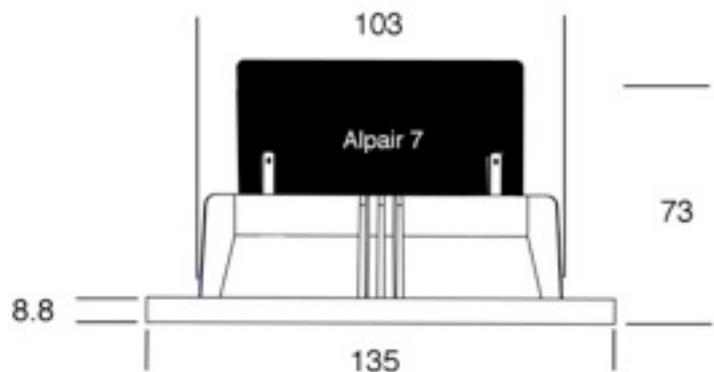
This driver incorporates a new cone multi-forming technology originally developed in Japan. The cones are made using 7 separate CNC controlled forming and trimming processes. The accuracy of this technology is superior to conventional spun and press methods.

Tadashi Matsubara San, a most experienced senior driver designer from Japan, has produced the rear suspension. It is unique and exclusive to the Alpair 7. Lui Yi Ping, a specialist in front suspension design from Taiwan, has engineered the 7's suspension which is the most advanced of its type so far. It is ultra-thin and requires an all new production process for this component. The same exclusivity is also applied to the frame, coil, connectors - every part for this driver is unique custom designed.

The acoustic result is remarkable for a driver of this size; delivering outstanding clarity, detail and musical realism.



$R_{vc} = 3.600 \text{ Ohm}$
 $F_o = 69.0 \text{ Hz}$
 $S_d = 50.24 \text{ cm}^2$
 $V_{as} = 3.48 \text{ Ltr}$
 $C_{ms} = 913.149 \mu \text{ M/N}$
 $M_{md} = 5.456 \text{ g}$
 $M_{ms} = 5.660 \text{ g}$
 $BL = 3.342 \text{ T}\cdot\text{M}$
 $Q_{ms} = 2.015$
 $Q_{es} = 0.803$
 $Q_{ts} = 0.574$
 $L_{vc} = 0.0188 \text{ mH}$
 $N_o = 0.135 \%$
 $SPL_o = 84.5 \text{ dB}$
 $X_{max} = 4.4\text{-mm 1 way}$
 $P_{wr} = 20 \text{ Watts Nom.}$



Two colour choices, gun-metal grey and classic gold. Drivers are packed in pairs with 2-mm thick seals and 8 X 22-mm long Hex head wood screws.

Handling

Don't touch the cone or cap. These are delicate components.

Running in period

The Alpair 7 has advanced suspensions that require careful running in:

Don't use any kind of artificially generated sound signal.

Hours 1 to 20. Low volume vocal and light music, no heavy bass. Hours 21 to 120, gradually increase the volume to normal listening levels and gently introduce rhythmic bass music.

Patience and care will bring musical rewards.

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