

Alpair 7 (Gen. 3)

Extended Full-Range emitter

Grey colour cone model



The Alpair 7 Gen. 3 represents a large step forward in the design and production of “extended” full-range audio drivers. In its size class, this Alpair 7 currently delivers the widest frequency range*. The usable range now extends to 32-kHz above 80dB, that’s higher than many tweeters!

This Alpair 7 has an advanced damping systems such that it delivers a “near flat” response across its range. The 7 employs a rear ring-clamped suspension system and a new torque loaded rear suspension (spider). Both these components add pre-tension to the power-train. The result is improved linearity and damping on the moving components.

The rear magnet cover can be removed. The covers magnetic attraction keeps it attached to the main driver body. Simply pull away from the driver’s main body, no tools are needed to do this job. Removal help those box makers who design shallow cabinets or wish to optimise internal box volumes. The performance change with the cover removed is small, so the installation choices for the end user is optimal. The frame’s front cover is also made removable. While we recommend its use, the frame’s diameter is minimised to 130-mm, helping box those who want to make slimmer box designs.

The acoustic performance of this driver is solidly placed in the “purist-audiophile” category. Its cone and power-train are the most micro-resonance sensitive made by Markaudio to date. With the rear and front covers attached, the driver has a SPL of near 86dB while retaining an X-max of +4-mm available for peak non-rhythmic bass loads. In a optimised box design, the system can be made capable of operating from 40-Hz to 32-kHz, possibly a unique performance for a simple cone driver in its size and class. The off axis responses and central stereo image emitted from this Alpair 7 are possibly best in class. Its cone profile and under-hung front suspension allow for a clean wide acoustic image making it easier to optimise box positioning in most listening environments.

The Alpair 7 Gen. 3 is near unique (if not totally unique). Its range, near flat response and special design features set it apart from other full-range driver of similar size.

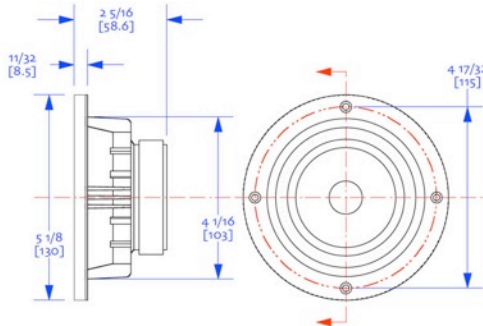
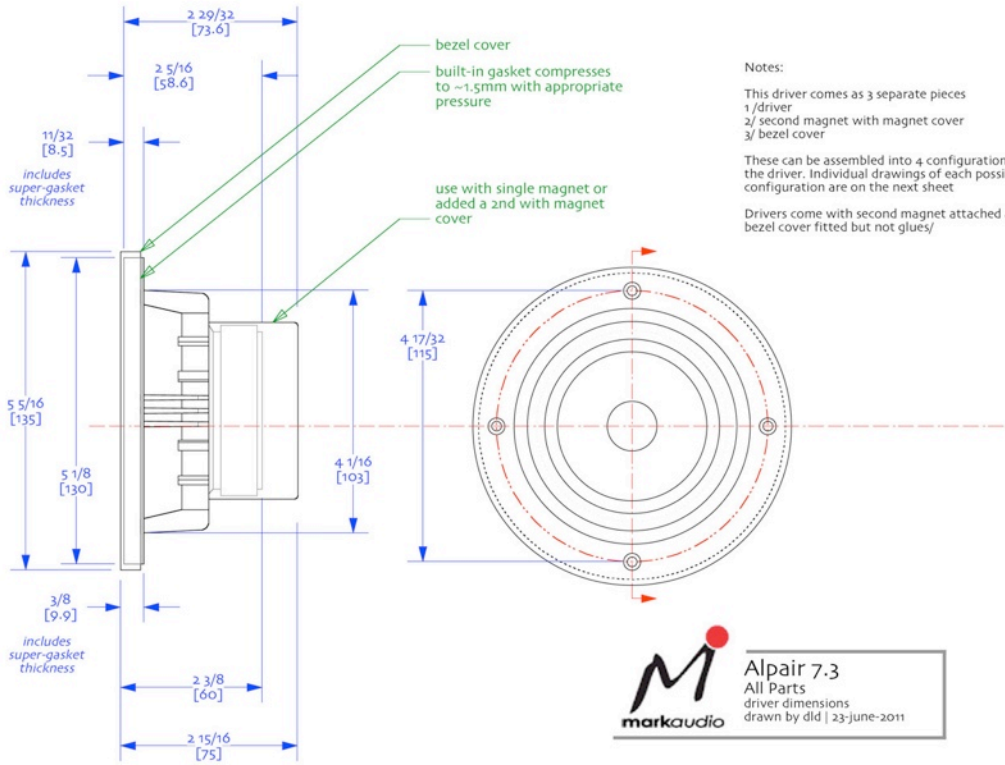
*Extensive research on the available drivers of similar size, found none offering the wide range delivery of the Alpair 7 Gen. 3 - June 2011.



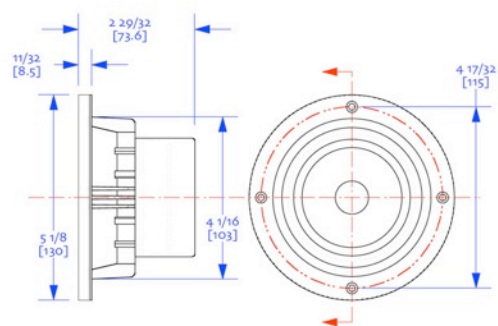
Alpair 7 Gen. 3	Data (with cover)
REVC	5.4 Ohm
Fo	70.90 Hz
Sd	5.02 K mm ²
Vas	4.58 Ltrs
Cms	1.27 uM/N
Mmd	3.74 g
Mms	3.95 g
BL	3.83 T*M
Qms	3.07
Qes	0.65
Qts	0.54
Levc	21.30 uH
No	0.24%
Spl Spl	85.80 dB (with rear cover) 85.20 dB (rear cover removed)
Pwr	20w Nom.
X max	4.2 mm 1 way
Coil Dia	20-mm
Main tolerance	+/- 1.5 Hz on mean Fo



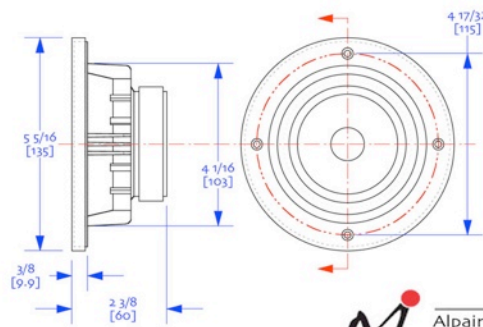
Small to medium sized speakers are usually lower power designs. The power rating is given in the technical data for each audio driver. For a reliable long service life, please operate your new speakers with care. For the first 100 hours, operate them at very low volumes. After this period, gradually increase the volume to a normal listening level. If you see the cone of the speakers making large movements, immediately turn the volume down. This will protect the speaker and your human hearing from damage. Factory mechanical defects for a period of 1 year. Excessive hard use (over-driving) and other damage caused during customer use is excluded from our warranty.



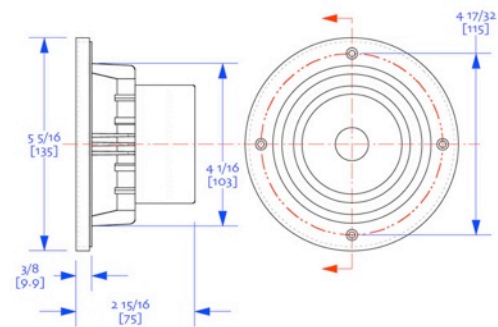
A: 1 magnet / no bezel cover



B: 2 magnets / no bezel cover



C: 1 magnet / bezel cover



D: 2 magnets / bezel cover

