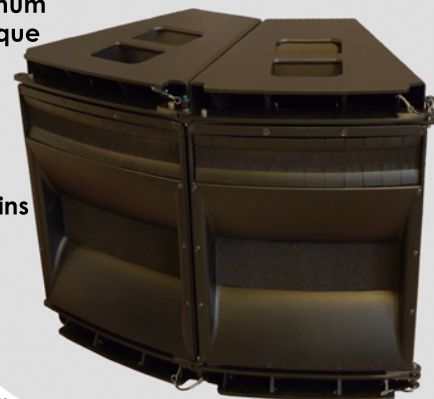


Features

- * It can be used as a single point source box with a dispersion of 120x30 degrees.
- * It can be used in clusters with minimum interference problems due to the unique treble solution.
- * It can be used as both vertical and horizontal line-arrays.
- * Easy rigging: Only 3 quickrelease pins per cabinet.
- * Very low weight compared to the height of the line-array: 88 kg/m.
- * Superior sound quality with 10 times lower distortion than the highest quality compressor driver systems.



Description

Today there are mainly two principles for PA-speakers:

1. The point-source, often trapezoid shaped
2. Line-array systems

The principles are complements to each other and the rental companies will need both systems, usually meaning a low usage level which equals a low profit. The point-source usually has interference-problems during clustering. The line-array usually has sound quality problems due to compromises regarding the horn-flare and the long throats for the treble section among others.

We felt that the market needed a loudspeaker system that can be used both as a point-source system in clusters as well as a line-array system in both vertical and horizontal planes with no compromises.

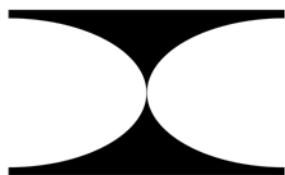
In order to achieve this, we have made the following solutions among others:

1. The unique treble solution that is patented is bendable from 0 - 30 degrees. It is bent as a part of a perfect circle and this gets an excellent coherence.

2. The enclosures are of visco-elastic damped rigid aluminium alloy construction that make 22% less gross volume and 40% lower weight compared to common construction line-array using their separate wood cabinet-metal frame system. The panel resonances are much smaller compared to common plywood cabinets that make better middle range definition.

3. Compared to the size the bass capacity is very high because the cabinet is tuned to 50Hz and the two 10" transducers have an unusual long linear excursion of +/- 7mm. These transducers that are developed by ourselves have the highest sound quality.

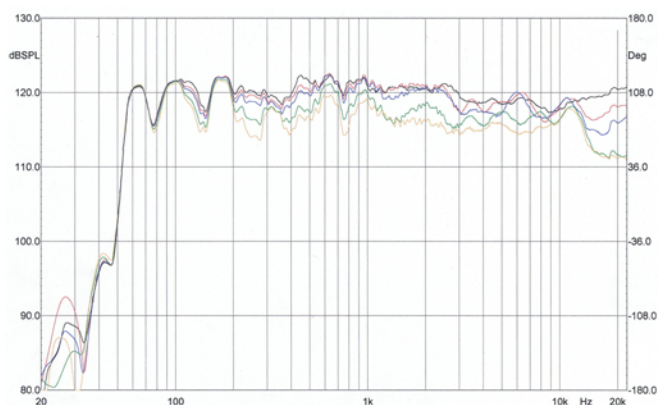
4. The design with the treble unit next to the middle range wave-guide made it possible to optimize the flanges of the wave-guides with no compromises concerning dispersion and frequency response. However it requires a thorough design of the crossover filter, therefore we developed a passive temperature stable filter with 80dB/oct slopes that fulfil our demands.



SOUND PRECISION

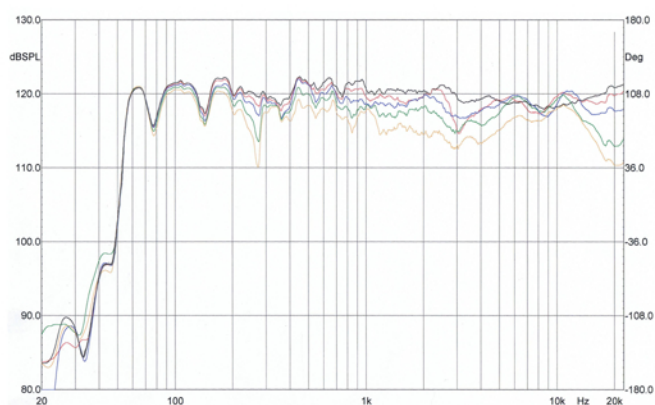


Horizontal Left

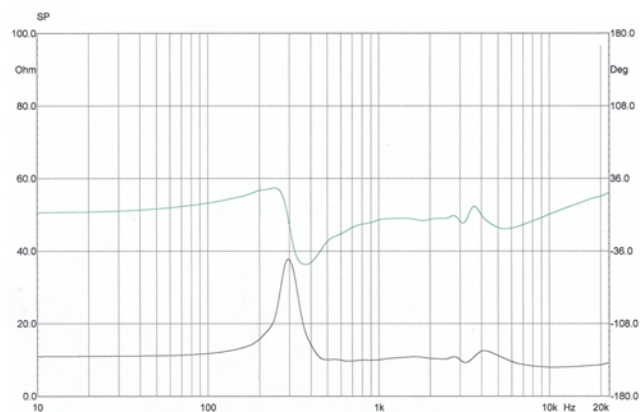


Fullspace: BLACK= 0° RED= 15° BLUE= 30° GREEN= 45° ORANGE= 60°

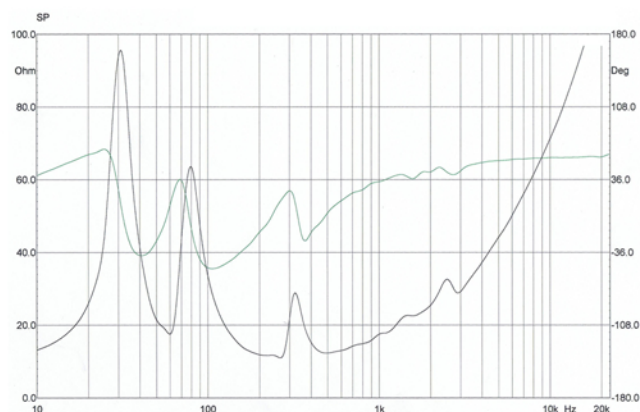
Horizontal Right



Fullspace: BLACK= 0° RED= 15° BLUE= 30° GREEN= 45° ORANGE= 60°



Channel 2
GREEN= Phase Angle
BLACK= Impedance



Channel 1
GREEN= Phase Angle
BLACK= Impedance

Specifications

Components: 2x26cm LF, 2x17cm MF, 1x36cm HF
3-way biamped fullrange speaker with passive x-over mid-treble

Frequency response
-with preset EQ: 50-22000 Hz

Recommended filtering
-Lowpass: < 16000 Hz
-Highpass: 45 Hz, Butter, 24 dB/Oct

Dispersion: 50°+70° horizontally

Impedance Ohms, nom: 12+12
Recommended amplifier power: 1600 W LF, 800-1300 W MF-HF @ 8Ω
1600-2600 W MF-HF@ 4Ω

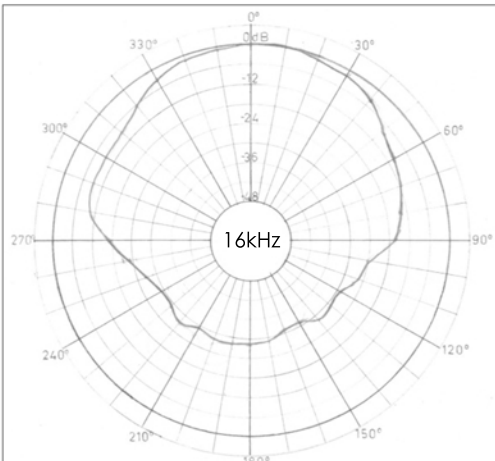
Sensitivity dB/w/m average, half
space: 100 LF, 107 MF-HF

Maximum SPL dB Program/Peak: 131/135

Connectors (in and trough): 2x NL-4MPR SPEAKON

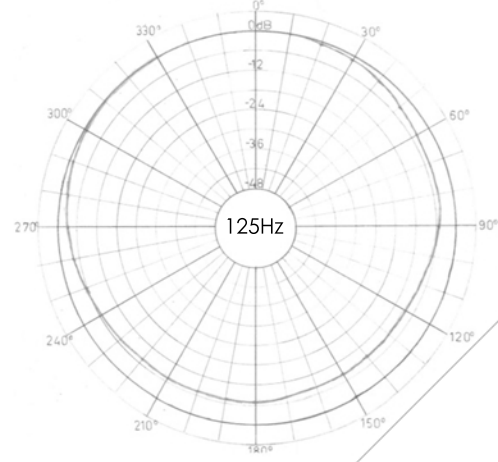
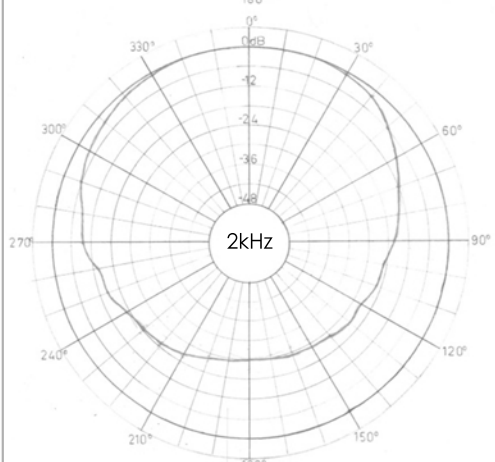
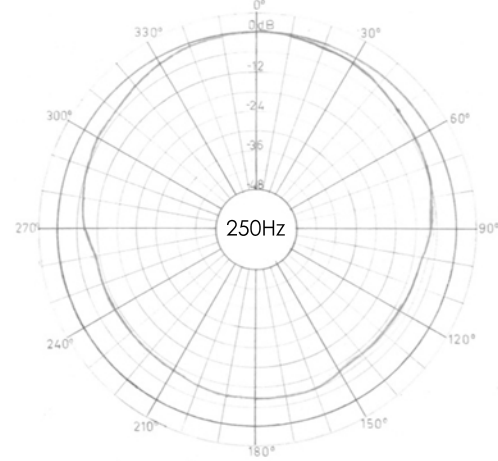
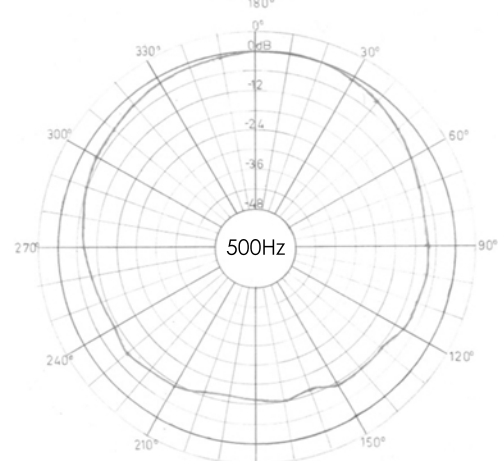
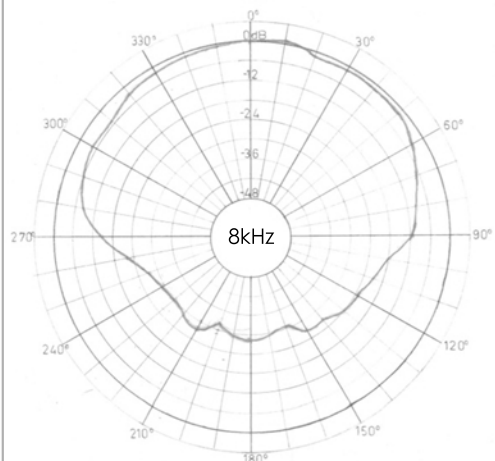
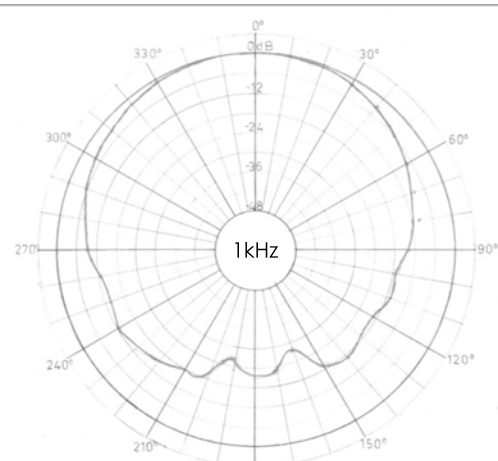
Width (as line-array): 565 mm
Height (as line-array): 365 mm
Depth (as line-array): 392 mm

Volume gross: 56 l
Weight: 32 kg



VHA-40

Polar diagrams



SOUND
PRECISION

