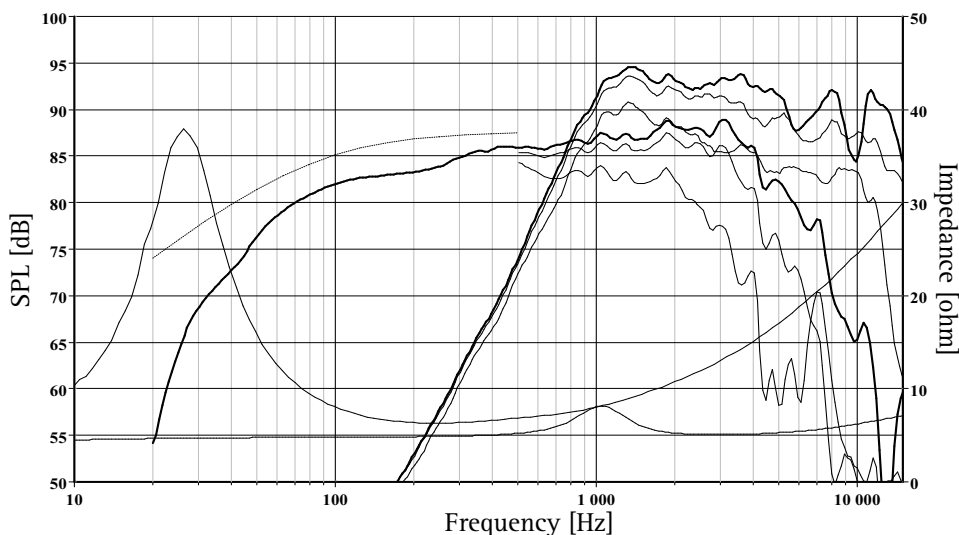


The PP/TPX based cone matches ideally with the adaptive rubber surround. This result is an outstandingly smooth frequency response from the mid woofer.

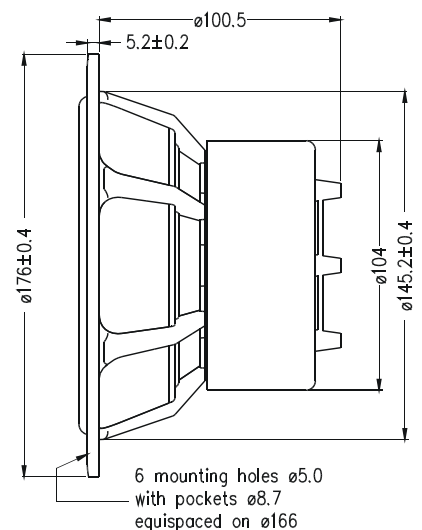
The coaxially arranged precoated fabric dome high frequency unit has a low resonance frequency, and integrates with the cone driver to a point source.

The cone of the woofer acts as a horn loading for the tweeter, and the chassis of the dome unit represents the throat of this horn.

The compensation magnet and the shielding cup is mounted on the woofer magnet system to eliminate magnetic stray fields, hence the unit can be used very close to CRT's in audio/video applications.



The frequency responses above show measured free field sound pressure in 0, 30, and 60 degrees angle using a 12L closed box. Input 2.83 VRMS, microphone distance 0.5m, normalized to SPL 1m. The dotted line is a calculated response in infinite baffle based on the parameters given for this specific driver. The impedance is measured in free air without baffle using a 2V sine signal.



	Woofer	Tweeter		Woofer	Tweeter
Nominal Impedance	8 Ohms	6 Ohms	Voice Coil Resistance	6.1 Ohms	4.8 Ohms
Recommended Frequency Range	30-3000 Hz	2000-25000	Voice Coil Inductance	0.79 mH	0.05 mH
Short Term Power Handling *	250 W	220 W	Force Factor	6.8 N/A	2.3 N/A
Long Term Power Handling *	80 W	90 W	Free Air Resonance	26 Hz	1200 Hz
Characteristic Sensitivity (2.83V, 1m)	87 dB	88.5	Moving Mass	13.7 g	0.3 g
Voice Coil Diameter	39 mm	26 mm	Air Load Mass In IEC Baffle	0.76 g	-
Voice Coil Height	12 mm	1.5 mm	Suspension Compliance	2.7mm/N	-
Air Gap Height	6 mm	2.0 mm	Suspension Mechanical Resistance	1.45Ns/m	-
Linear Coil Travel (p-p)	6 mm	0.5 mm	Effective Piston Area	120 cm ²	7 cm ²
Maximum Coil Travel (p-p)	19 mm	-	VAS	52 Litres	-
Magnetic Gap Flux Density	0.87 T	1.2 T	QMS	1.63	-
Magnet Weight	0.84 kg	-	QES	0.31	-
Total Weight	1.91 kg	-	QTS	0.26	-

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*IEC 268-5(Tweeter via high pass butterworth filter 3500 Hz, 12 dB/oct)
SEAS reserves the right to change technical data

MI18-301

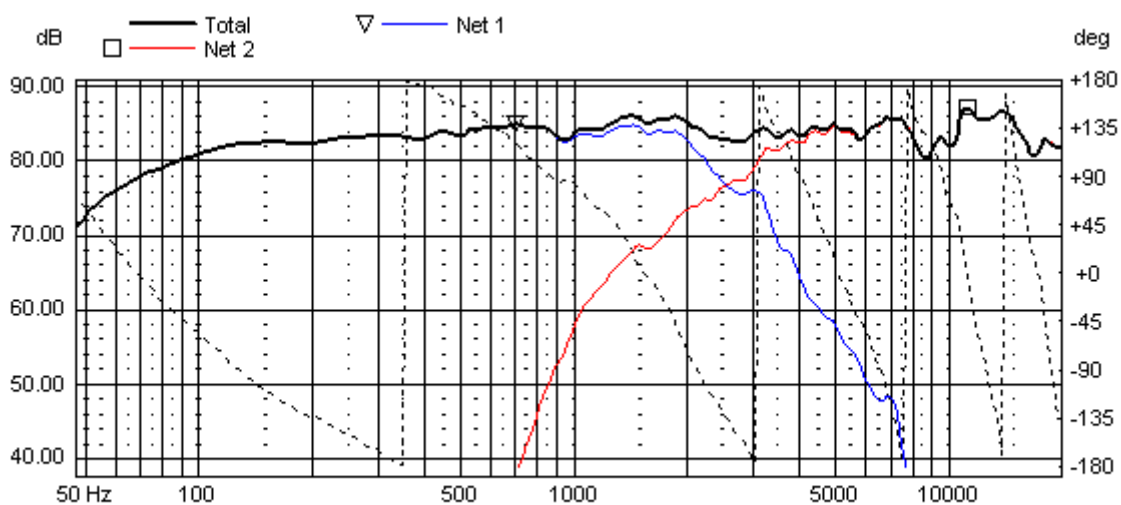
Crossover for Seas H1144-08/06 - T18RE/XFCTV Coaxial loudspeaker



This crossover is simulated in LspCAD based on measurements are done with ATB Precision using stepped sine signal with 250 measuring points.

The loudspeaker is mounted in a 12 liter closed box with outside dimensions 213mm x 320mm x 262mm (W H D). The driver was not flush mounted, so to minimize diffraction only found directly on-axis, the measurements were done 10 degrees off-axis.

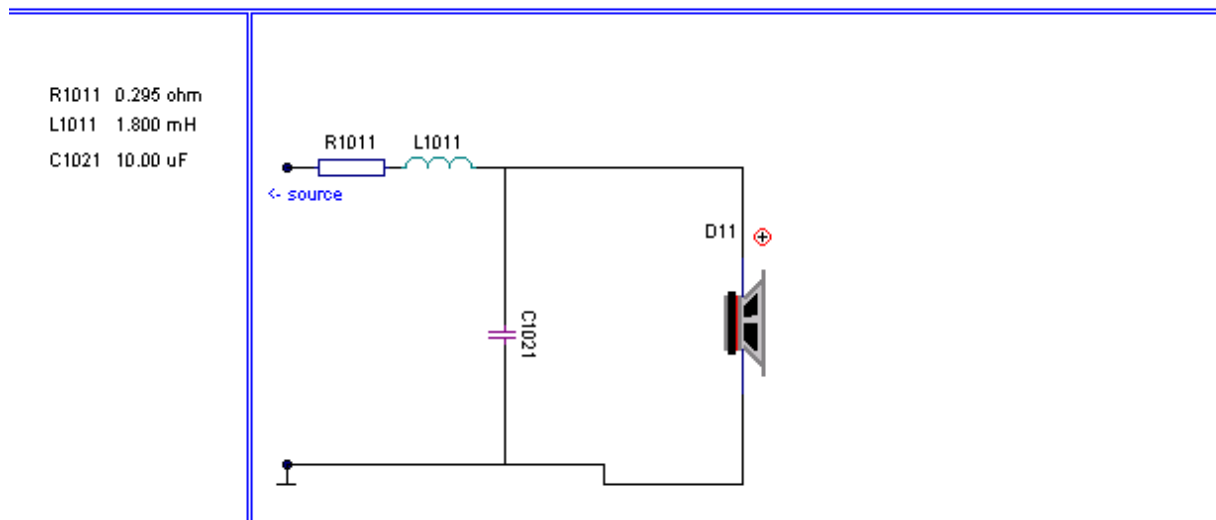
Measurements were done in the anechoic chamber at the Seas laboratory. The loudspeaker was radiating in free-field (4pi).



System sensitivity is approximately 85dB SPL / 2.83 volts / 1meter

Woofer low-pass filter:

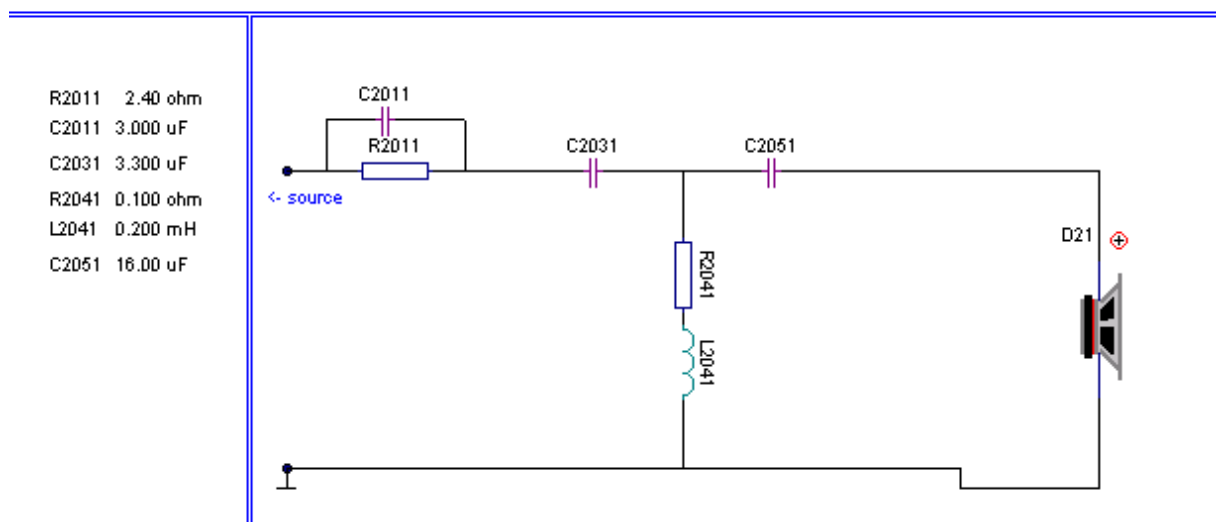
Net 1



Please note that R1011 is not an actual component, just an estimate of the inductors series resistance.

Tweeter high-pass filter:

Net 2



Please note that R2041 is not an actual component, just an estimate of the inductors series resistance. C2011 is optional – when in place it lifts the response above 10 kHz slightly.

