

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

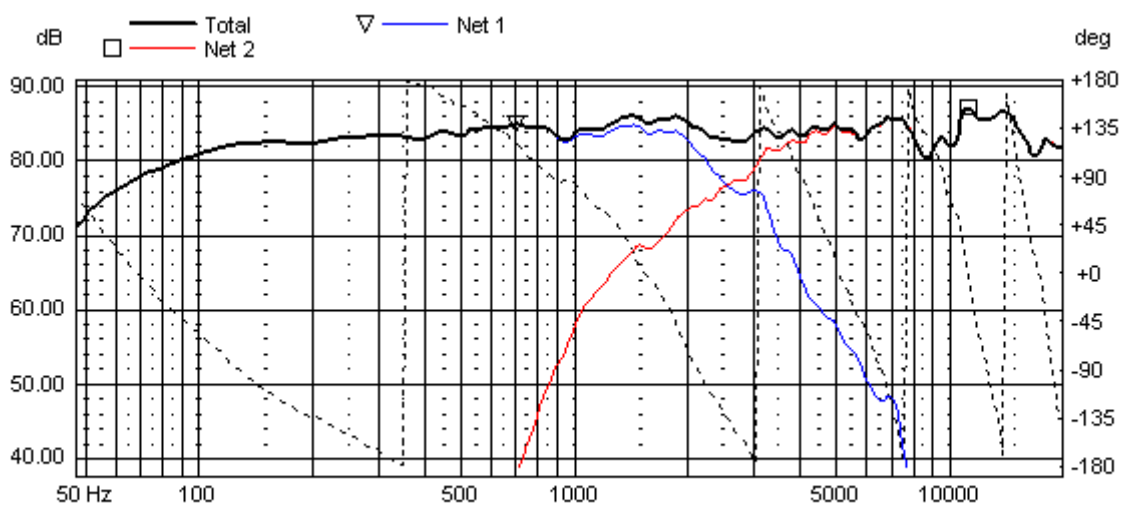


This crossover is simulated in LspCAD based on measurements are done with ATB Precision using stepped sine signal with 250 measuring points.

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).

We recommend a box size of 12 liters (0.42 cubic feet) with a 2" diameter port by 5.5" long. This box will result in bass response at -3dB at 54Hz. The SP21R passive radiator could also be used instead of the port. The total moving mass of the passive radiator should be 61 grams. The moving mass of the SP21R is 28 grams, so you will need to add 33 more grams. The passive radiator should give you -3dB at 51Hz.

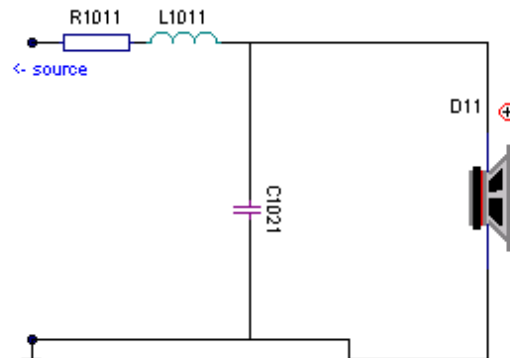


System sensitivity is approximately 85dB SPL / 2.83 volts / 1 meter

Woofer low-pass filter:

Net 1

R1011 0.295 ohm
L1011 1.800 mH
C1021 10.00 uF

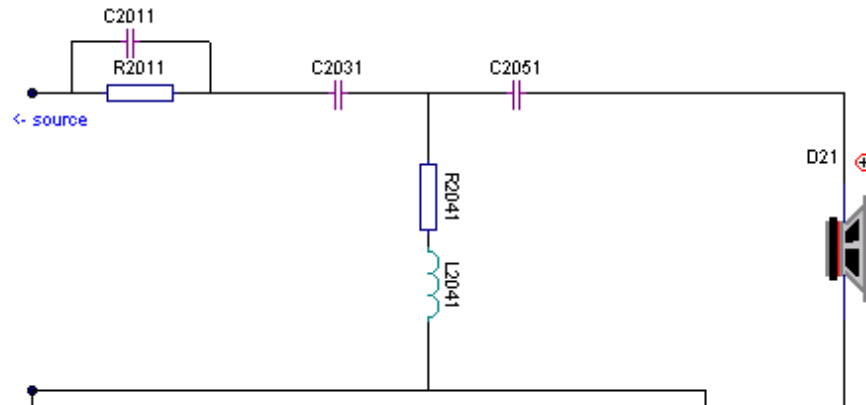


Please note that R1011 is not an actual component, just an estimate of the inductors series resistance.

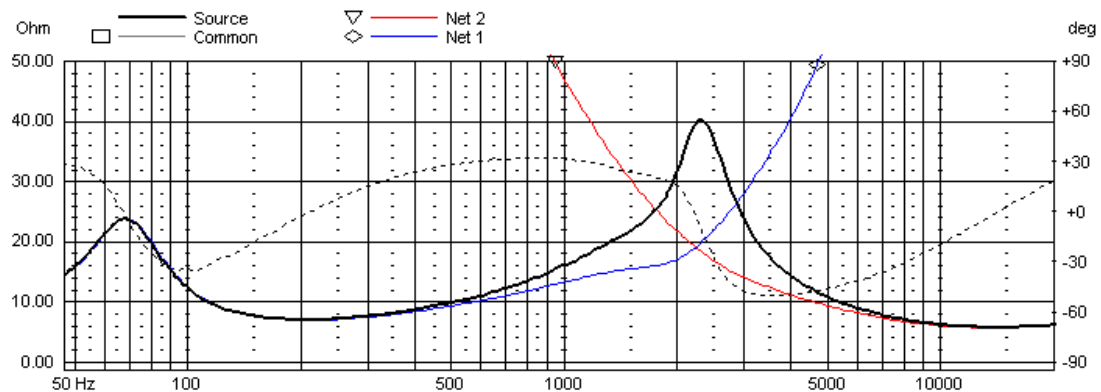
Tweeter high-pass filter:

Net 2

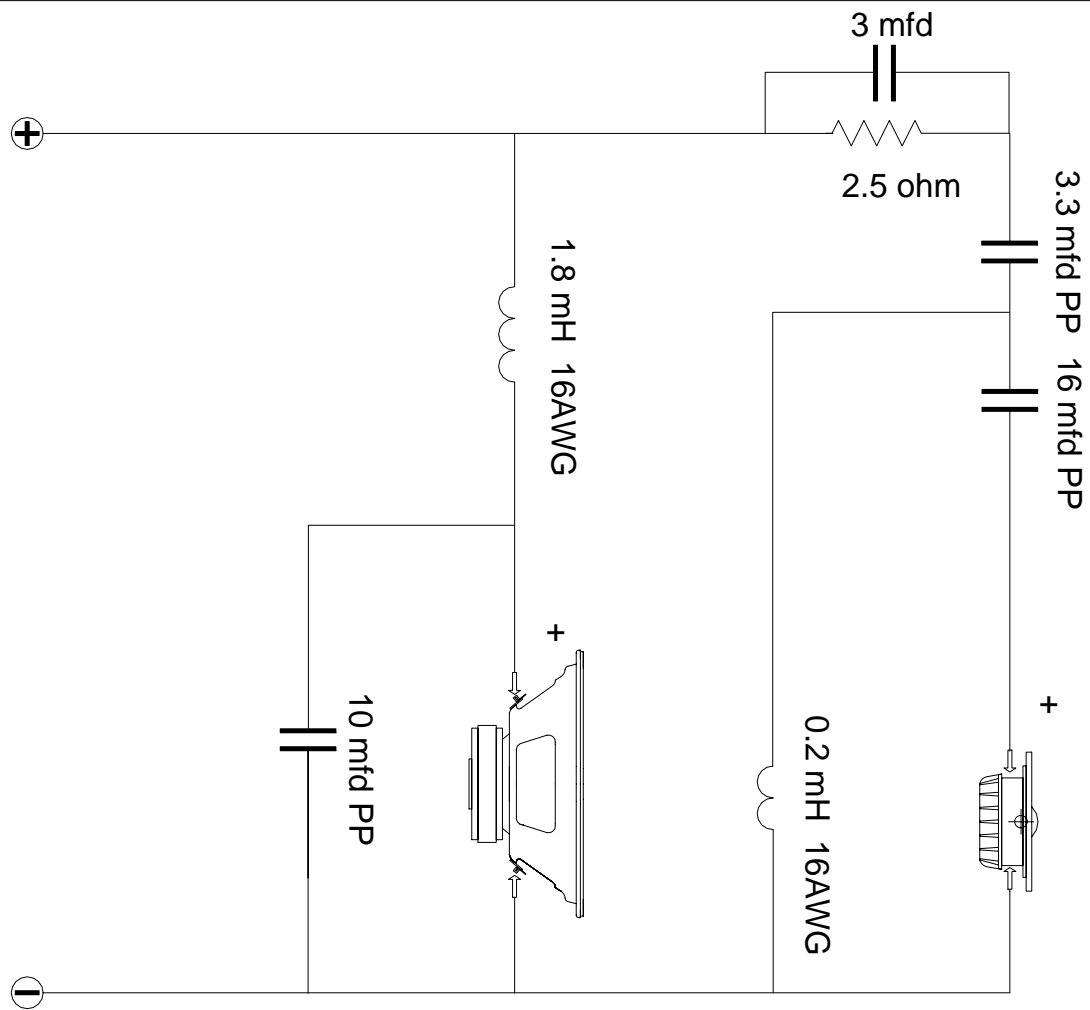
R2011 2.40 ohm
C2011 3.000 uF
C2031 3.300 uF
R2041 0.100 ohm
L2041 0.200 mH
C2051 16.00 uF



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.



CUSTOMER:



Woofer

Tweeter

T18RECOAX/TVFC (H1144)
Seas Coaxial