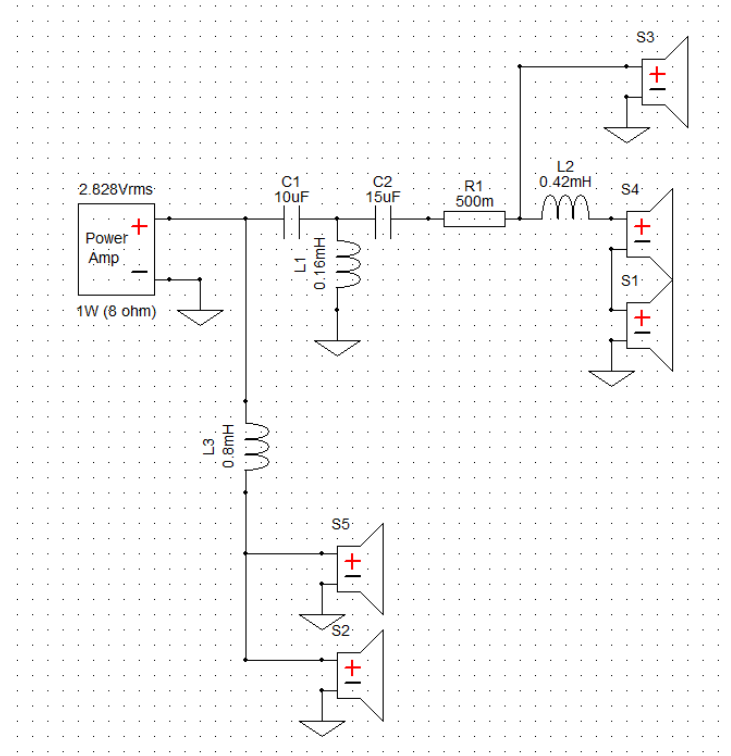
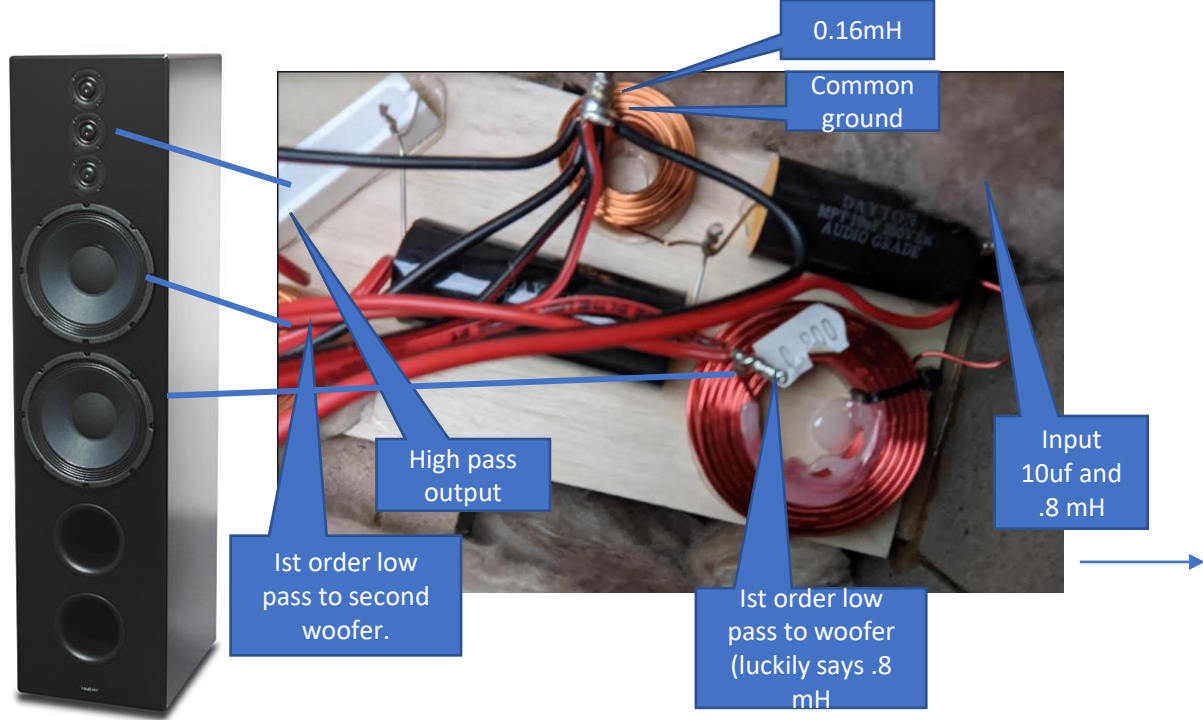


Tekton Enzo.

Eminence Driver.

Peerless Tweeter



Issues:

- Very simple first order filter for woofers, no Zobel network
- Bad layout of everything specially inductors
- No apparent impedance matching on tweeters (need it?)
- No L pad on tweeters to match the woofers (need it?)

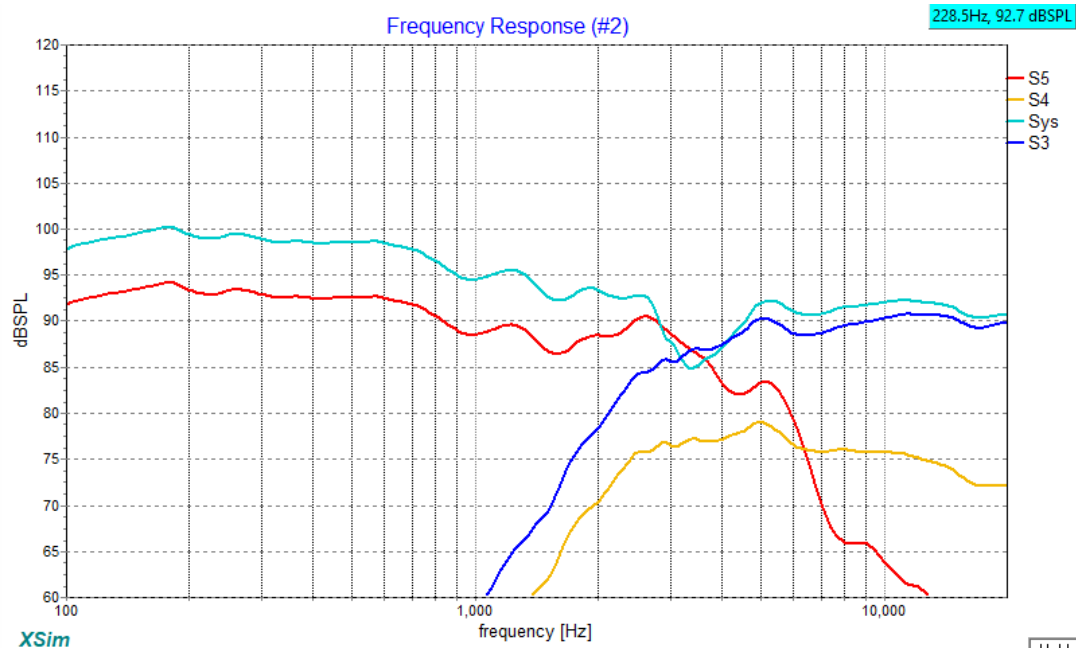
L1 and L2 are measured values. Tweeter is Peerless XT25SC90-04; Woofer is similar to Eminence Beta-8CX given the Thiele parameters measured.

SPL and Impedance data for Woofer Tweeter plotted using FPGraph and entered into XSim

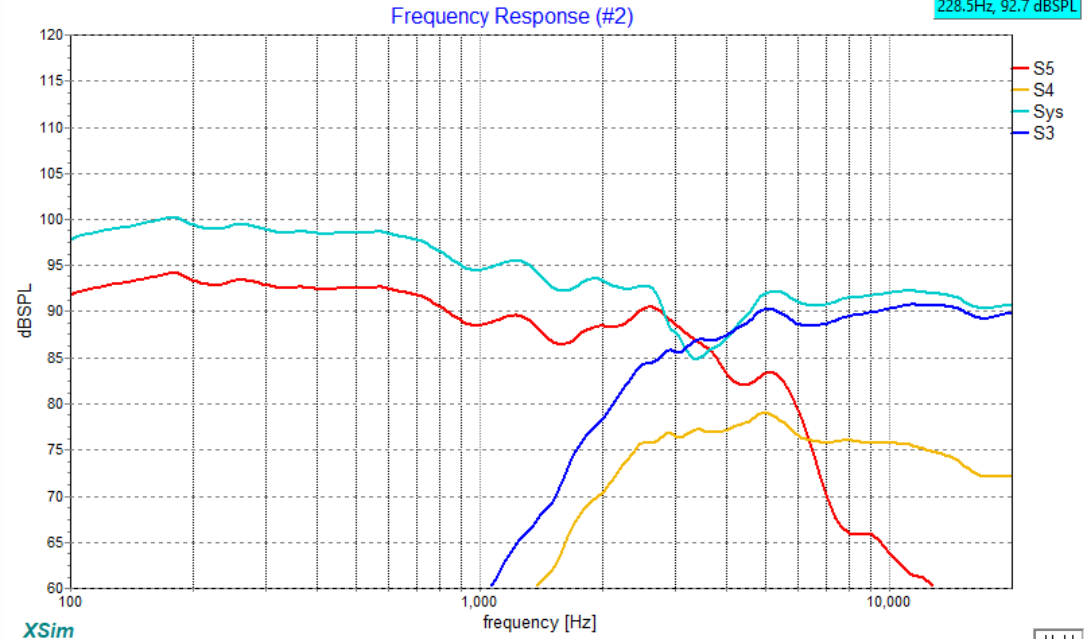
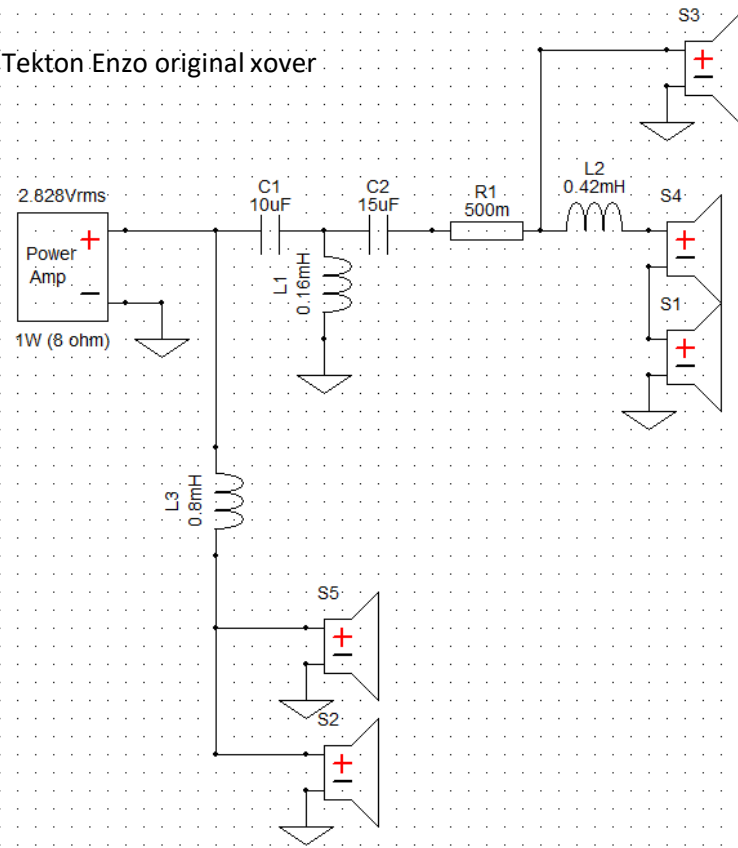
Unknown Crossover frequency for 3rd order HP filter with the components shown:

- even using the equations can't get to those values. Something is off based on

these devices used, help!?



Tekton Enzo original xover



Woofers	Thiele Parameters	Measured/Calculated
Re	DC Res	5.38
FR	Res Freq	86
Rr	R@Res Freq	25.6
R1	Sqr(Re*Rr)	11.74
F1/F2 @ R1	Driver R @ R1	61.5/115.5
Fr (calc)	Sqr(F1*F2)	84
Qf	Fr/(F2-F1)	1.59
Qtc	Qf/sqr(Rr/Re)	0.3975
Rc @ Fc	Res @ Fc (meas)	@1kHz – 9; @2kHz – 12.5
L	Sqr(sq(Rc)-Sq(Re)) / 2PiFc	@1Hz – 1.15mH