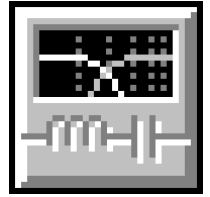


Custom Two-Way Crossover Network Design

By Chris, Solen Inc.



2-Way Crossover Network

Low-Pass (LP) Filter: 1 required

Type: 2nd-Order Linkwitz-Riley

Desired Corner Frequency: 2000 Hz

High-Pass (HP) Filter: 1 required

Type: 2nd-Order Linkwitz-Riley

Desired Corner Frequency: 2000 Hz

C1 = 4.7 μ F, SA470, 0.000698 ohms

C2 = 5.6 μ F, Polypropylene, 0.00678 ohms

L1 = 1.3 mH, Air Core (#18), 0.539 ohms

L2 = 1.2 mH, Litz (#14), 0.23 ohms

Tweeter

6.73 dB L-Pad

Rp1 = 4.3 ohms

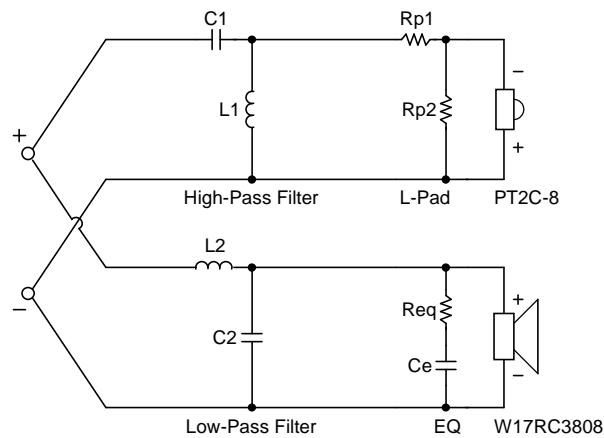
Rp2 = 6.8 ohms

Woofers

Impedance EQ

Req = 8.2 ohms

Ce = 18 μ F





Tweeter Properties

--Driver Description--
 Name: PT2C-8
 Type: Standard one-way driver
 Company: Dayton Audio
 Piston: Ribbon
 --Driver Configuration--
No. of Drivers = 1
 --Driver Parameters--
 Fs = 1654 Hz
 Qms = 2.48
 Vas = 0.14 liters
 Cms = 0.093 mm/N
 Mms = 0.1 g
 Rms = 0.42 kg/s
 Xmax = 0.1 mm
 Xmech = 0.15 mm
 Sd = 32.4 sq.cm
 P-Vd = 0.000324 liters
 Qes = 41.17
 Re = 6.9 ohms
 Le = 0.03 mH
 Z = 8 ohms
 BL = 0.42 Tm
 Pe = 80 watts
 Qts = 2.34
 no = 1.46 %
 1-W SPL = 94 dB
 2.83-V SPL = 94.7 dB

Woofers Properties

--Driver Description--
 Name: W17RC3808
 Type: Standard one-way driver
 Company: Silver Flute
 --Driver Configuration--
No. of Drivers = 1
 --Driver Parameters--
 Fs = 40.5 Hz
 Qms = 1.5
 Vas = 28 liters
 Cms = 1.12 mm/N
 Mms = 13.79 g
 Rms = 2.34 kg/s
 Xmax = 5 mm
 Xmech = 7.5 mm
 P-Dia = 130 mm
 Sd = 132.7 sq.cm
 P-Vd = 0.0664 liters
 Qes = 0.36
 Re = 7.3 ohms
 Z = 8 ohms
 BL = 8.435 Tm
 Pe = 80 watts
 Qts = 0.29
 no = 0.498 %
 1-W SPL = 89.12 dB
 2.83-V SPL = 89.52 dB

Graph Key: — LP — HP — Net

