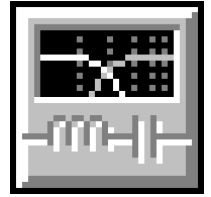


# Custom Two-Way Crossover Network Design

By Chris, Solen Inc.



## 2-Way Crossover Network

Low-Pass (LP) Filter: 1 required

Type: 2nd-Order Linkwitz-Riley

Desired Corner Frequency: 3000 Hz

High-Pass (HP) Filter: 1 required

Type: 3rd-Order Butterworth

Desired Corner Frequency: 3000 Hz

C1 = 6.2  $\mu$ F, Polypropylene, 0.00659 ohms

C2 = 18  $\mu$ F, Polypropylene, 0.00395 ohms

C3 = 5.1  $\mu$ F, Polypropylene, 0.00697 ohms

L1 = 0.24 mH, Litz (#16), 0.278 ohms

L2 = 0.47 mH, (#14), 0.134 ohms

## Tweeter

6.84 dB L-Pad

Rp1 = 3.3 ohms

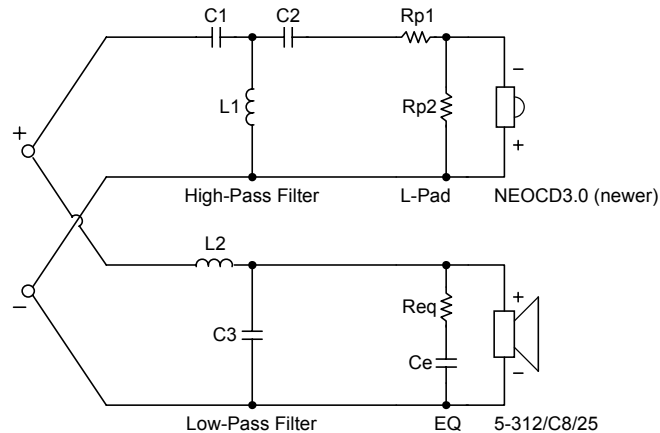
Rp2 = 5.1 ohms

## Woofer

Impedance EQ

Req = 6.8 ohms

Ce = 16  $\mu$ F





### Tweeter Properties

--Driver Description--

Name: NEOCD3.0 (newer)

Type: Standard one-way driver

Company: Fountek Electronics

--Driver Configuration--

**No. of Drivers = 1**

--Driver Parameters--

Fs = 1200 Hz  
 Qms = 3.795  
 Vas = 0.0523 liters  
 Cms = 1.598 mm/N  
 Mms = 0.05 g  
 Rms = 0.0219 kg/s  
 Xmax = 0.1 mm  
 Xmech = 0.15 mm  
 P-Dia = 24.72 mm  
 Sd = 4.8 sq.cm  
 P-Vd = 0.000048 liters  
 Qes = 1.152  
 Re = 5 ohms  
 Z = 6 ohms  
 BL = 0.6 Tm  
 Pe = 60 watts  
 Qts = 0.884  
 1-W SPL = 93 dB  
 2.83-V SPL = 93 dB

### Woofer Properties

--Driver Description--

Name: 5-312/C8/25

Type: Standard one-way driver

Company: Eton

--Driver Configuration--

**No. of Drivers = 1**

--Driver Parameters--

Fs = 51 Hz  
 Qms = 6.55  
 Vas = 9 liters  
 Cms = 1.03 mm/N  
 Mms = 9 g  
 Rms = 0.463 kg/s  
 Xmax = 2 mm  
 Xmech = 3 mm  
 P-Dia = 99.93 mm  
 Sd = 80 sq.cm  
 P-Vd = 0.0157 liters  
 Qes = 0.42  
 Re = 5.3 ohms  
 Z = 8 ohms  
 BL = 6.033 Tm  
 Pe = 50 watts  
 Qts = 0.39  
 no = 0.274 %  
 1-W SPL = 86.53 dB  
 2.83-V SPL = 88 dB

Graph Key: — LP — HP — Net

