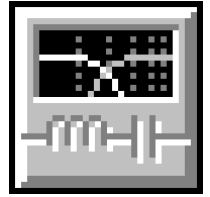


# Custom Two-Way Crossover Network Design

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## 2-Way Crossover Network

Low-Pass (LP) Filter: 1 required

Type: 3rd-Order Butterworth

Desired Corner Frequency: 3000 Hz

High-Pass (HP) Filter: 1 required

Type: 3rd-Order Butterworth

Desired Corner Frequency: 3000 Hz

C1 = 4  $\mu$ F, Polypropylene, 0.00655 ohms

C2 = 12  $\mu$ F, Polypropylene, 0.0039 ohms

C3 = 24  $\mu$ F, Polypropylene, 0.00324 ohms

L1 = 0.2 mH, Air Core (#16), 0.277 ohms

L2 = 0.2 mH, Air Core (#16), 0.277 ohms

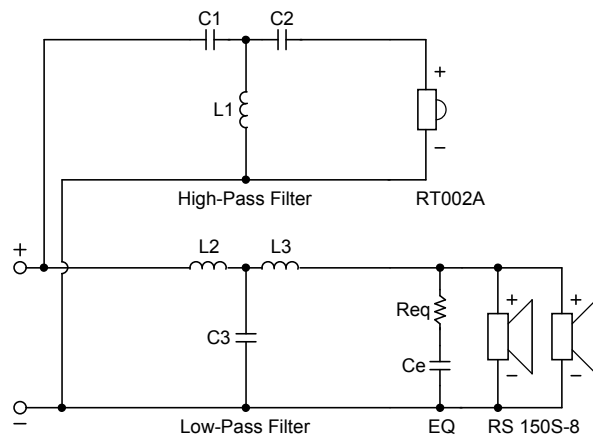
L3 = 0.1 mH, Air Core (#16), 0.259 ohms

## Woofers

Impedance EQ

Req = 3 ohms

Ce = 40  $\mu$ F





**Tweeter Properties**

--Driver Description--

Name: RT002A  
 Type: Standard one-way driver  
 --Driver Configuration--

**No. of Drivers = 1**

--Driver Parameters--

Fs = 0.1 Hz  
 Qms = 1  
 Vas = 10400078044 liters  
 Cms = 173321858125 mm/N  
 Mms = 0.0000146 g  
 Rms = 0.00000000918 kg/s  
 Sd = 6.5 sq.cm  
 Qes = 1  
 Re = 5.9 ohms  
 Le = 0.000000001 mH  
 Z = 6 ohms  
 BL = 0.000233 Tm  
 Pe = 20 watts  
 Qts = 0.5  
 1-W SPL = 92 dB  
 2.83-V SPL = 93.5 dB

**Woofers Properties**

--Driver Description--

Name: RS 150S-8  
 Type: Standard one-way driver  
 Company: Dayton Loudspeaker Co.  
 --Driver Configuration--

**No. of Drivers = 2**

Mounting = Standard

Wiring = Parallel

--Driver Parameters--

Fs = 53.8 Hz  
 Qms = 2.52  
 Vas = 12 liters [24]  
 Cms = 1.18 mm/N [0.59]  
 Mms = 7.38 g [14.76]  
 Rms = 0.995 kg/s [1.99]  
 Xmax = 4 mm  
 Xmech = 6 mm  
 P-Dia = 103.8 mm [146.8]  
 Sd = 84.9 sq.cm [169.8]  
 P-Vd = 34 liters [68]  
 Qes = 0.56  
 Re = 6 ohms [3]  
 Le = 0.76 mH [0.38]  
 Z = 8 ohms [4]  
 BL = 5.18 Tm [5.17]  
 Pe = 40 watts [80]  
 Qts = 0.46  
 no = 0.322 % [0.643]  
 1-W SPL = 88 dB [91.01]  
 2.83-V SPL = 88.47 dB [94.49]

Graph Key: — LP — HP — Net

