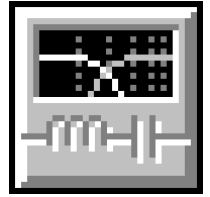


# Custom Two-Way Crossover Network Design

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## 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: 2nd-Order Linkwitz-Riley

Desired Corner Frequency: 3000 Hz

C1 = 4  $\mu$ F, Polypropylene, 0.00722 ohms

C2 = 3  $\mu$ F, Polypropylene, 0.00723 ohms

L1 = 1.5 mH, Air Core (#16), 0.325 ohms

L2 = 0.6 mH, Air Core (#16), 0.326 ohms

## Tweeter

5.81 dB L-Pad

Rp1 = 3 ohms

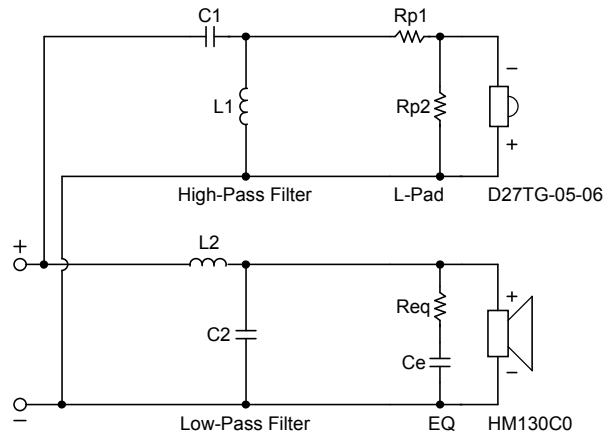
Rp2 = 10 ohms

## Woofers

Impedance EQ

Req = 6.2 ohms

Ce = 10  $\mu$ F





**Tweeter Properties**

--Driver Description--

Name: D27TG-05-06

Type: Standard one-way driver

Company: Vifa

--Driver Configuration--

**No. of Drivers = 1**

--Driver Parameters--

Fs = 1000 Hz  
 Qms = 2.15  
 Vas = 0.006 liters  
 Mms = 0.3 g  
 Xmax = 0.15 mm  
 Sd = 7.1 sq.cm  
 Qes = 1.19  
 Re = 4.6 ohms  
 Le = 0.0481 mH  
 Z = 6 ohms  
 BL = 2.7 Tm  
 Pe = 100 watts  
 Qts = 0.77  
 1-W SPL = 91 dB  
 2.83-V SPL = 92 dB

**Woofers Properties**

--Driver Description--

Name: HM130CO

Type: Standard one-way driver

Company: Audax Industries

Comment: Reference series

--Driver Configuration--

**No. of Drivers = 1**

--Driver Parameters--

Fs = 46 Hz  
 Qms = 3.6  
 Vas = 18.1 liters  
 Cms = 1.78 mm/N  
 Mms = 6.9 g  
 Rms = 0.55 kg/s  
 Xmax = 3 mm  
 Xmech = 4.5 mm  
 P-Dia = 103.8 mm  
 Sd = 85 sq.cm  
 P-Vd = 0.0254 liters  
 Qes = 0.34  
 Re = 6.2 ohms  
 Le = 0.39 mH  
 Z = 8 ohms  
 BL = 5.97 Tm  
 Pe = 50 watts  
 Qts = 0.31  
 no = 0.5 %  
 1-W SPL = 90 dB  
 2.83-V SPL = 90.24 dB

Graph Key: — LP — HP — Net

