

Custom Three-Way Crossover Network Design

Meniscus Audio Group Inc.



3-Way Crossover Network

Low-Pass (LP) Filter: 1 required

Type: 2nd-Order All-Pass (APC)

Desired Corner Frequency: 350 Hz

Band-Pass (BP) Filter: 1 required

Type: 2nd-Order All-Pass (APC)

Desired Lower Corner Freq: 350 Hz

Desired Upper Corner Freq: 3000 Hz

High-Pass (HP) Filter: 1 required

Type: 3rd-Order All-Pass (APC)

Desired Corner Frequency: 3000 Hz

C1 = 3.3 μ F, Polypropylene, 0.00755 ohms

C2 = 9.1 μ F, Polypropylene, 0.00535 ohms

C3 = 68 μ F, Electrolytic, 0.0857 ohms

C4 = 4.7 μ F, Polypropylene, 0.0071 ohms

C5 = 33 μ F, Electrolytic, 0.196 ohms

L1 = 0.45 mH, Air Core (#20), 0.447 ohms

L2 = 4.5 mH, Laminate I Core (#18), 0.3 ohms

L3 = 0.45 mH, Air Core (#18), 0.297 ohms

L4 = 6 mH, Laminate I Core (#18), 0.39 ohms

Band-pass Gain = 2.33 dB

Tweeter

9.78 dB L-Pad

Rp1 = 8.2 ohms

Rp2 = 10 ohms

Midrange

Impedance EQ

Req = 5 ohms

Ce = 22 μ F

Woofers

Impedance EQ

Req = 6.2 ohms

Ce = 22 μ F

