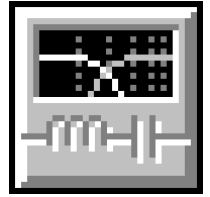


Custom Two-Way Crossover Network Design

By Dr F. Mark Carter, Walberswick Studios



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

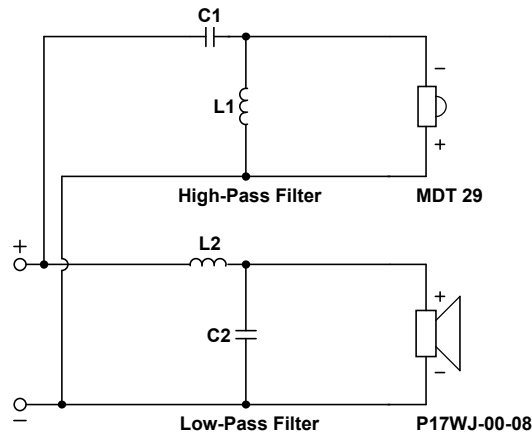
Desired Corner Frequency: 3000 Hz

C1 = 5.5 μ F, Polypropylene, 0.00697 ohms

C2 = 6 μ F, Polypropylene, 4 ohms

L1 = 0.3 mH, Air Core (#16), 0.285 ohms

L2 = 0.5 mH, Air Core (#16), 0.319 ohms



Tweeter Properties

--Driver Description--

Name: MDT 29

Type: Standard one-way driver

Company: Morel (USA and Israel)

--Driver Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 900 Hz
Qms = 1.9
Mms = 0.5 g
Sd = 6 sq.cm
Qes = 1.35
Re = 5.2 ohms
Le = 0.05 mH
Z = 8 ohms
BL = 3.3 Tm
Pe = 80 watts
Qts = 0.79
1-W SPL = 89 dB

Woofer Properties

--Driver Description--

Name: P17WJ-00-08

Type: Standard one-way driver

Company: Vifa

--Driver Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 37 Hz
Qms = 1.55
Vas = 34.7 liters
Mms = 14 g
Xmax = 4 mm
Sd = 136 sq.cm
Qes = 0.45
Re = 5.8 ohms
Le = 0.55 mH
Z = 8 ohms
BL = 6.5 Tm
Pe = 40 watts
Qts = 0.35
1-W SPL = 88 dB



Graph Key: — LP — HP — Net

