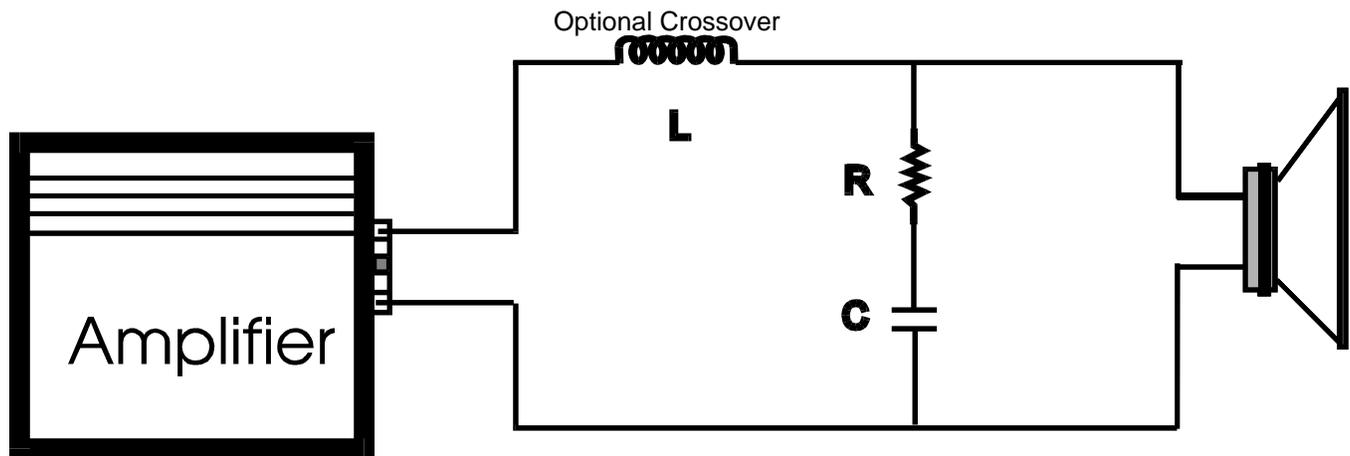


ZOBEL IMPEDANCE CORRECTION NETWORK

The Zobel Impedance Correction Network consists of a capacitor and a resistor wired in parallel with the woofer as illustrated below.



The formula for figuring the values for the Zobel Impedance Correction Network are:

$LE =$ The woofer's voice coil inductance.

$RE =$ The woofer's voice coil DC resistance.

$$LE \div (RE \times RE) \times 1000 = C$$

$$RE \times 1.25 = R$$



ZOBEL IMPEDANCE CORRECTION NETWORK

Example:KFC-W3000, $LE = 1.09$, $RE = 3.15$

$$LE \div (RE \times RE) \times 1000 = C$$

$$1.09 \text{ mH} \div (3.15 \Omega \times 3.15 \Omega) \times 1000 = 109 \mu\text{F}$$

$$RE \times 1.25 = R$$

$$3.15 \Omega \times 1.25 = 3.94 \Omega$$

If the woofer specifications are not available, the following are approximent componet values:

WOOFER	IMPEDANCE	RESISTOR	CAPACITOR
15"	4 ohm	4 ohm (min. 20 watt)	100 μF (min 10 volts)
12"	4 ohm	4 ohm (min. 20 watt)	100 μF (min 10 volts)
10"	4 ohm	4 ohm (min. 20 watt)	50 μF (min 10 volts)
8"	4 ohm	4 ohm (min. 20 watt)	40 μF (min 10 volts)
6"	4 ohm	4 ohm (min. 20 watt)	30 μF (min 10 volts)

Note: for 8 ohm woofers double the resistor and half the capacitor. For 2 ohm woofers half the resistor and double the capacitor.