Subject: zobel network..many doubts!!
Posted by Vinicius on Sat, 09 Apr 2005 20:39:40 GMT
View Forum Message <> Reply to Message

Hi, Wayne Parham and everybody(Sorry for my English!!)I'm from Brazil and I saw this post, and I still have a doubt!I have a bi-amplified system (two-way sytem or called component sytem) and a active crossover before de amplifier.The first doubt:I will put a zobel network and I need to know if can I put it between the amplifier and the speaker directly (without passive crossover)?----------The second doubt:Wich formulas above is correct to find the value of the capacitor to build the zobel?f= Frequency impedance doublepi = 3,14....Rvc = Re = Resistance of teh coil voiceC = 1 / (2 X pi x f x Rvc)http://sound.westhost.com/lr-passive.htm#1-impedanceorC(microfarad)= 1,000,000/(6283 x Nominal impedance x f)http://www.the12volt.com/caraudio/crosscalc3.asp#zobel ----------The third doubt:To find the frequency impedance double wich formulas is the correct?Lvc = Le = Inductance of the voice coilf = Rvc/ (2 x pi x Lvc)orf = 2 x Rvc? This means Frequency impedance double, but the values are different!!Thank you very much!!Vinicius

Subject: Zobel - Conjugate Impedance Compensation
Posted by Wayne Parham on Sun, 10 Apr 2005 14:03:53 GMT
View Forum Message <> Reply to Message

There is no reason for a conjugate filter unless you are running a passive crossover. The main reason for a Zobel is to conjugate the inductance a speaker's voice coil, to counteract for its rising impedance. It is done to modify the behavior of the crossover and make the filter function of a passive crossover more pure.

With an active crossover, you don't want a Zobel on the speaker drivers. Connect them directly to the amp.<p>Here are some documents that describe electrical filters in more detail:Crossover Electronics 101