
Subject: 2nd order Butterworth vs 3rd order Butterworth
Posted by [spkrman57](#) on Tue, 20 Aug 2002 11:22:16 GMT

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Wayne, Using your 3rd order (BW) with JBL horn/driver (2418 on 2373 lens), standard textbook pi x-over(15 ohm/30 ohm/.47ufd) works great! (my 4 pi's in 3677 cabs and 2226J), but when I take the same approach with Altec horns/drivers (511/811)-(806/802) with Altec drivers, the resultant sound is not as natural as when I use a 2nd order BW (Altec's standard crossover). I'm not sure why this is, but the difference in the horns, JBL sounds more forward and more like domed driver, but the Altec, sets the deeper soundstage and requires triple the cap compensation value of the JBL's to sound similar. Would your attenuation/compensation circuit work ok with 2nd order BW??? I recall posts from some time back where you mentioned the necessity of 3rd order when using atten/compensation due to the load on the crossover. It might even have been mentioned in your crossover document. I wish I knew why the 2nd order sounds better on the Altec's, but the 3rd order sounds better on the JBL's. I have been unable to successfully incorporate JBL woofer/Altec horn system to work as well as my all JBL system. Could you shed some light on this. Thanks, ROn