Subject: big improvement
Posted by replay on Thu, 28 Jun 2001 14:04:56 GMT
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hi wayne, i quickly installed one x-over last night and had a listen. the high frequencies are back and that hollow sound is gone! i'll do the other one tonight and hopefully all will be well. thanks again.

Subject: Re: big improvement
Posted by Wayne Parham on Thu, 28 Jun 2001 16:42:45 GMT
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Glad to hear it, thanks for reporting back. The way the crossover you had was wired, I imagine it didn't sound all that great. This should sound a lot better for you.

Subject: Re: big improvement
Posted by replay on Thu, 28 Jun 2001 17:10:34 GMT
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hi wayne, so this is what i'm going to tackle with your help. if you go to the jblpro website and click on cinema products you will see some small cabinets with a single 15" driver in a bass reflex enclosure. on top the horn is mounted externally, they look kinda cool and my wife will be happy. i want to build 4 pi premium stage, i already have the woofers. question, can i install the woofer higher in the cabinet since the tweeter will be external? the jbl's are about $1700.00 us a pair, i can build these for significantly less.as always nice talking to you.thanksgeorge

Subject: Re: big improvement
Posted by Wayne Parham on Thu, 28 Jun 2001 18:28:46 GMT
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I think that will look very nice. You can do it as long as you retain the physical distance relationships between woofer and tweeter. The front-to-back spacing sets the forward axis of in-phase summing, so you want the tweeter to still be at the same position as if it were flush mounted on the baffle. Don't set it back, in other words. And the vertical spacing between woofer and tweeter sets the width of the arc between off-axis anti-phase nulls in the vertical plane, basically setting the height of the vertical radiating angle in the crossover overlap band. So the tweeter should be the same distance above the woofer too.Also, don't raise the woofer above about 18" or you'll start to see a notch from floor bounce. When it's less than a couple feet up, the reflection from the floor sums constructively. The reflection acts much like another woofer, so the further up it is, the further away the virtual second woofer is. The distance between the sound source and the reflected virtual source creates off-axis nulls in much the same way that two real sound sources do. In this case, the ground itself is the forward axis, so there is only one vertical off-axis null, above the speaker at an angle determined by the height of the woofer and the frequency emitted by it.The bottom line here is you want to retain the physical distance relationships betwen woofer and tweeter and you don't really want your woofer to be up off the ground more than a couple feet. Not in a two-way speaker like this. So follow those simple rules, and you can mount the tweeter externally.

Subject: thanks again i'll keep you posted!
Posted by replay on Fri, 29 Jun 2001 14:08:45 GMT
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