Subject: Re: Midbass slam Posted by johnnycamp5 on Wed, 27 Jul 2016 19:32:19 GMT View Forum Message <> Reply to Message

jonone wrote on Wed, 27 July 2016 10:19Sub bass frequency's are many tens of feet long, so 5ft from the speakers shouldnt make any difference.

In my opinion I would only use sealed for subs and you need drivers with huge magnets to control the cone, lack of control leads to boom in my experience and I cant see how a passive radiator is under control properly?

crossed over low enough it maybe ok, eq will probably help too, Your room will also benefit from the flanking subs as the room modes will be lessened and modes normally lead to one note boom.

Have you measured your rooms response?

I have not measured my room, in a way that I can look at a graph, but I have run sweeps and hz test tones.

I had discovered a huge null at 70hz (throughout the center of the room) and another at around 150hz.

I have since added considerable acoustic treatment, and had heard a significant improvement in bass response afterwards.

The trouble I've had with blending this sub with the mains, only comes when I try to cross over at 100z.

At 70hz, there is much less trouble integrating.

Perhaps im refering to the problem of localization instead of integration, but again, that could be reduced with a slightly closer (lateral) placement to the mains.

In theory, the passive radiator is supposed to vibrate back and forth in the exact same manner as the air-plug in a port tube.

I wasnt aware of the woofer magnet size being important, I always thought it was really a matter of how strong the magnet was, regardless of size.

I did notice that the actual "size" of the sub woofer magnet on this passive radiator sub is quite a bit smaller than the magnets on the Eminence lab 12's Im using for the 3pi subs.

I would not mind using a sealed design, and would also enjoy the smaller enclosure that (typically) comes with it.

I only thought that the larger, ported cabinet would be easier to drive, requiring less power, while having less woofer excursion/distortion, above the tuning frequency.

I have chosen to incorporate these 3pi subs to help with the notch in the upper bass, lower midrange, that inevitably comes in a residential environment/room. Not so much for the extra LFE, that bottom octave (20hz-40hz).

I suppose the term "midbass modules" or "helper woofers" might be better descriptions, as to what I'm using the flanking subs for.