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Subject: Re: 4PI Plans Request

Posted by [Wayne Parham](#) on Mon, 16 Dec 2019 15:48:28 GMT

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mathiasb wrote on Sun, 15 December 2019 22:12 I'm having difficulty finding a good high pass for the mains. Considering they'll be getting a full range signal I want to protect them. The tuning is around 50Hz. With a sub LPF of BU2 100Hz, is BU4/BU3 HPF at 50-60Hz a good start for the mains? After that - there's the playing around with the delays to get the sub and speaker to integrate, before even looking at EQ.

High-pass at 50Hz fourth-order is fine.

As for the delay, please remember that what we're doing with flanking subs actually requires some delay. The modal range is caused by a multitude of phase interactions from reflected signals. There are multiple reflectors and therefore multiple delays. Each wall, the floor and the ceiling is a different distance and creates a signal with a different delay. So the application of multisubs - flanking subs and distributed subs alike - is to create dense interference, not to create in-phase summing. The purpose is to make the modal field act more like the statistical field, having dense interference to smooth the region.