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Subject: Re: Low Pass

Posted by [Wayne Parham](#) on Thu, 14 Nov 2019 16:56:03 GMT

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The problems you're talking about are pretty common. They're impedance-matching problems. The load of the passive crossover is interacting with the output impedance of the preamp. And those inline filters are really lossy too, so I don't like using them. I had hoped they would work, but they really don't.

I've found a few easy solutions:

1. The inexpensive second-order crossovers often used in car stereos
2. Amplifiers with built-in second-order tone controls
3. Mini-DSP

Try this out, Barry. It's an example of solution # 2. I think it will work out well for you. It's super easy to do.

Find an amp with built-in bass and treble controls where the low-pass function in the bass control is 100Hz, second-order. You just turn the treble all the way down and turn the bass all the way up, and the resulting transfer function works nicely for flanking subs. It's a happy accident, I suppose. Level-set the amplitude of the subs to match the mains and you're done.

One example is the Audiosource amp100VS. It's just a 50 watt amp, but that works well for people that have 10 watt SET amps for their mains. There are probably many other products of this type. If an amplifier has built-in tone controls that use second-order filters, and if the bass adjustment frequency is 100Hz or so, then the amp will work very well for flanking subs.

I've attached the spec sheet for this little amp. See the link below. You'll notice it lists the bass control as being a second-order 100Hz filter. That's what we want. Nice that the bass and treble controls are on the back too, 'cause that way it's out of sight. They're just set to make it a flanking sub amp.

Look for amplifiers like that.

When searching for amplifiers for your flanking subs, you can always try out a product and send it back if it doesn't blend well. Just open the box carefully and keep all the packing material so you can repackage it properly if it doesn't serve your purpose.

AMP100VS Datasheet