Subject: Passive crossover breadboarding
Posted by Wayne Parham on Sat, 17 Feb 2007 17:51:06 GMT
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Looks like an interesting way to switch passive components around to make different crossover configurations, similar to breadboarding. What components are in this box and how many configurations does it support? Does it use patch cords for connection or switching? It looks like yours uses switches. If so, are the configrations fixed, (say, second order) and the switches control what passive components are used? Can you switch in different values of dampers, with diferent fixed resisitance values and different capacitor and what not?I like your test box. It looks like a handy way to swap values. I might suggest using a large breadboard with various size inductors, capacitors and resistors with bannana plugs on each one. With a whole bunch of patch cords, you can build up any crossover configuration you want.Some would say "go active" and there is merit in that. But if you want to include a passive crossover, you have to design it with the characteristics of the drivers in mind. The reactance, resistance and non-linear properties of the driver interact with the crossover components, so the driver is an integral part of the crossover filter function. This can be simulated with Spice, or you can do it this way, with a physical model and measure the response.