Subject: Electronic crossover's any thoughts?
Posted by bmar on Thu, 01 Nov 2001 21:28:29 GMT
View Forum Message <> Reply to Message

Hi All,Wondering what anyone thinks of electronic crossover's instead of the standard coils, caps and res. maybe if the sound quality isnt as good, would they be good to dial in a speaker and then use the comparable components.thanks,bmar

Subject: Re: Electronic crossover's any thoughts?
Posted by Wayne Parham on Thu, 01 Nov 2001 21:51:25 GMT
View Forum Message <> Reply to Message

The biggest advantage to multi-amping is the bandwidth reduction you get. When you don't have HF riding on top of LF, you gain some dynamic range in the amps. As an example, if you have 40v peak bass content and 15v peak treble, then the amplifier must be capable of 65v output. That's because the LF modulates the HF, literally having HF signals riding on top of LF signals. If you separate the two, then you could only need a bass amp capable of handling 40 volts and a treble amp capable of doing 15 volts to reproduce the same signal.If you have a digital crossover, you can easily modify crossover characteristics with a simple programming change. That's nice for hobbyists that modify speakers a lot. Analog crossovers can be changed too, but that requires a component change, or sometimes a jumper change. Analog crossovers aren't usually as versatile because changing filter characteristics requires component changes. But in either case, don't underestimate the value of a good crossover. Designing proper filter characteristics for matching loudspeaker subsystems is not a trivial matter. Summing through the overlapping band is affected by electrical, mechanical and acoustic properties and getting it all correct takes a lot of work, particularly when considering directivity for best on and off axis response. That's important because the total reverberent field is what you hear, and that includes off-axis energy as well as on axis response.

Subject: Re: Electronic crossover's any thoughts?
Posted by bmar on Thu, 01 Nov 2001 23:56:24 GMT
View Forum Message <> Reply to Message

Hi Wayne,Thanks for the info.Although bi amp would be nice I only have one rite now. some of the other post sound like you have to bi amp with active xo. I was thinking you run your amp in and direct wire the motors to their respective range coming out of the active xo.the 600v 10uF cap for protection of the royal eminence is cool.I have been looking at the pro audio stuff ashly, peavey, behringer(?)many other good ones out there. Basically everyone wants the speakers to be flat. but everyones room is different and the perfect speaker placement isnt alway the best place to

have it! My general thought was with the pro audio crossovers. you can compensate driver SPL, change xo points to flaten or colour the sound to your liking with the twist of a few nobs. Dont get me wrong, as a traditionalist I dont mind the thought of having a few pounds of magnet wire, boxes of coils and caps to play with. (heck, I manufacture silver wire and was thinking of winding some hightest coils)The active rout just seems like it might be an easy place to start off at.thanks,Bill

---

Subject: Re: Electronic crossover's any thoughts?
Posted by alfredo on Fri, 02 Nov 2001 00:05:35 GMT
View Forum Message <> Reply to Message

Hi bmar. I like the use of electronic crossovers which I will be moving towards rather soon. Especially if your always tinkering with different speakers. Like you said they allow you to "dial" in the crossover frequency you need or at least think you need. Good passive crossover parts can cost a lot of money to build for a set of speakers. What if you guess on frequency and then realize you could have went lower or needed to go higher? Then you have to buy all new parts. With the electronic crossover you wouldn't have to do that. Just turn the dials!Alfredo

---

Subject: Re: Electronic crossover's any thoughts?
Posted by Wayne Parham on Fri, 02 Nov 2001 00:33:07 GMT
View Forum Message <> Reply to Message

If you want a crossover that gives a lot of flexibility, go with a digital crossover. Of course, analog purists would prefer a good analog unit. I think the best thing to do is to start with a digital crossover, use it for prototyping, and then implement an analog crossover of the final design.

Subject: Re: Electronic crossover's any thoughts?
Posted by bmar on Fri, 02 Nov 2001 00:52:28 GMT
View Forum Message <> Reply to Message

Thanks Alfredo,where can i find the specs for the CS 3115 ? having trouble locating them @jblthanks,Bill

---

Subject: Re: Electronic crossover's any thoughts?
Posted by alfredo on Fri, 02 Nov 2001 01:05:54 GMT
View Forum Message <> Reply to Message

When you go to jblpro.com click on products and then installed products. You will see a link that says the Venus Series. The CS 3115 is the same as the VS 3115. From what I read on the Lansing Heritage site the CS stands for Custom Shop(CS). I guess somebody called JBL and asked about them. Some theatre ordered them and never paid for them. You get the enclosure and all of the speakers but the enclosure is only sprayed with flat black and there is no grill. If you go to the forum on the lansingheritage site there are some more discussions about this speaker and about the JBL Tent Sale. Great bargain I think. CS3115Lansing HeritageAlfredo Abate

Subject: Re: Electronic crossover's any thoughts?
Posted by bmar on Fri, 02 Nov 2001 01:22:04 GMT
View Forum Message <> Reply to Message

ok thanks!i'm trying to see what the difference between the CS3115 and the CS3115B is.this is a good deal for some nice Pi parts :)

Subject: Re: Electronic crossover's any thoughts?
Posted by pickle on Fri, 02 Nov 2001 13:02:18 GMT
View Forum Message <> Reply to Message

B is "B stock" according to my call to JBL; I'd probably just order the others.....MBB

Subject: Re: Electronic crossover's any thoughts?
Posted by newjerseybt on Tue, 06 Nov 2001 17:52:03 GMT
View Forum Message <> Reply to Message

I used to be an Workers' Comp adjuster and have seen many hearingcharts which are deemed to be normal by ENT (Ear Nose and throat)experts but look quite different from one normal individual toanother. Many charts differ by + or - 3db and greater throughoutthe range tested. Note that W/C ENT doctors do not test the entirespectrum from 20HZ to 20k, but you still get my drift.That is why I have to question the "golden ears" who worry aboutteeny tiny details like capacitive reactance in speaker wire.We are talking pf per ft.!! Even a dog's ear would not be able tohear the difference

between 20 feet of high-end speaker wireand 12gauge lamp cord.