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Subject: Re: Can a notch filter improve phase lag?  
Posted by [roncla](#) on Thu, 01 Apr 2004 18:45:10 GMT  
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Well i will tell yall what happened.(ron jumps in his Way-back machine). I have been building speakers for round bout 30 yrs(before T/S was hear of),about 5 years ago i went to a guys home and heard some Lowthers in the Acousta horn cab, it was driven by an SET with a wopping output of around 4 watts.I had been straining all those years to make multi-ways sound good and yet even at the best there was something missing, i just didnt know what. Now the lowthers sometimes have a FR curve with slopes that you can surf on and the SET has distortion figures that would make a die hard sand amp type roll on the ground laughing.BUT i was totally blown away, i never heard sound like that.It was real in the sense that they were here in front of me. So i developed the mind set that flat response wasent all there was to re creating sound.I have found out (the hard way) that as long as the FR curve remains somewhat flat in a reasonable sense(no 20db dropouts) and the amp circuit remains as simple as possible (less influence on the signal) that you got the best sound. So here i am with battery powered gainclones (NIGC) with passive pre and rear loaded front firing Fe206e horns (cant afford lowthers).Its simple, its effective and for the cost its very very hard to match.While i do use resistance in the TQWT to up the Qts (not necessary in the horns)i dont use notch filters or BSC simply because i design for wall/floor loading and that makes the speakers near the wall ( $< 1/4 F_c \lambda$ ), so BSC is not necessary.I also have learned to angle the speakers off axis for correction of the rising SPL/frequency which also gives a larger sweet spot.ron

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