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Subject: Using filters on lowther type drivers

Posted by [akhilesh](#) on Wed, 28 Jul 2004 18:32:57 GMT

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HI Everyone, this is a total thought post, since i have never even heard a lowther driver. It seems from the frequency curves, that they have major jumps in SPL that need to be tamed. The main one seems to be 6-12 Khz (the lowther shout (700 hz -2 Khz seems to be now tamed with the new drivers). Has anyone tried a band stop filter in this region with a lowther driver? The idea is as follows: Have two parallel connections a & b from the amplifier to the driver. Connection a): One band stop (notch) filter (6-12 KHZ blocked) --- One BSC filter to augment the bass Connection b): One band pass filter to allow 6-12 KHZ through with a resistor to lower SPL. Anyone tried that? There may be major flaws in this too...would be interested in your responses. -akhilesh

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Subject: Addendum

Posted by [akhilesh](#) on Wed, 28 Jul 2004 18:56:00 GMT

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Clearly, resistor values in the BSC circuit and in the band pass filter will be different to tame the different SPLs differently. -akhilesh

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Subject: Re: Using filters on lowther type drivers

Posted by [Martin](#) on Wed, 28 Jul 2004 21:28:15 GMT

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akhilesh, You know I love filters. You also know that the Lowther measurements on my site clearly show the peak you describe. But for this particular peak, I would probably not use a filter. All you need to do is listen about 10 degrees off axis and the response is nice and flat and does not start to roll - off too bad at higher frequencies. A second option is a phase plug, there is a site linked from mine that shows Lowther DX3 measurements with several different styles of phase plugs. I have a growing collection of Lowther phase plugs and can state that they can be used to tame this on axis peak. Hope that helps, Martin

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Subject: Does imaging suffer with off-axis?

Posted by [akhilesh](#) on Thu, 29 Jul 2004 00:58:37 GMT

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Thanx for the response Martin. Very informative. Followup: do you think imaging suffers with

off-axis? BTW, i kind-of believe filters too now, as you know! Thanks to you in no small part.  
-akihlesh

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Subject: Re: Does imaging suffer with off-axis?  
Posted by [Martin](#) on Thu, 29 Jul 2004 10:10:07 GMT  
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akihlesh, For the small angle off of the axis I am talking about, I do not believe that the imaging is compromised. I had my DX3 ML TL speakers at a friend's house last summer (Bryston SS amp) and a group started listening to them positioned on axis, everybody seemed content with this arrangement for a while. I was standing back watching and listening to the feedback and discussion comparing my speakers to his Dynaudio TL's. Then the group decided to try rotating them out a little to assess the change. Two people started rotating the speakers and when they hit about 5 to 10 degrees off axis the listener shouted "Right there!". They continued taking turns in the listening position and rotating the speakers more or less but kept coming back to about the same orientation. Nothing scientific, it was a different room from mine but the results seemed to be consistent with the way I have them set-up. It was an interesting evening. Martin

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