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Subject: Re: Class A, AB1, B, C Operation/Modes  
Posted by [positron](#) on Fri, 10 Feb 2023 03:35:14 GMT  
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gofar99 wrote on Thu, 09 February 2023 21:01Hi, MLs act like huge capacitors. They go from just over 4 ohms at low frequencies to 1 ohm at 20K. The slope of impedance can give many amps fits. It was why I added 3 db of frequency limited NFB to my amps. I figured they were about as tough a load as anything anyone would use. (some crossovers might be worse though) I have not had any misbehave without it...but testing shows a strong resonance point in most of the amps at about 70-85KHZ. So I start the slope at about 25-30K and it insures stability no matter what the amp sees on the output side. I have tested all of the various sizes with and without the NFB and have not been able to get any to mess up...still a couple of parts is cheap insurance. In the commercial versions and shown on the diy schematics I show NFB defeat switches and most folks can only say that the use of NFB cuts the gain by a few db. No surprise there...but in a blind test can't tell which one is which.  
Yes, that is quite a change in load.

After discussing the matter with a Harvard Medical School chair years ago, one item I think we need to be cautious of is blind testing.

There are many confound variables that need to be addressed. Otherwise the test will always be skewed toward no sonic difference. It then basically becomes a rigged test.

I used to test every day for weeks, months or longer, but addressing confounds. Now I have the ability to hear the change quite easily. I still test every day after a tweak is made, just to be sure though.

cheers and all the best.

pos