Subject: driver tweak to King BR box
Posted by jim denton on Wed, 31 Dec 2008 20:04:21 GMT
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Many months ago Bob Brines told me I could remove the cast basket off my Lowther EX-2's to make them DX-2's seemed dangerous an after months of irration at how bad the King BR box sounded I did it--and boy was Bob spot on! Major improvement!! come to find from serious surfing that there are few designs with the EX 2--especially in the DIY world...now a new search for a DX-2 box to build! Jim

Subject: Re: driver tweak to King BR box
Posted by Wayne Parham on Wed, 31 Dec 2008 21:22:23 GMT
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Not sure what you mean. To me, the basket is the frame. Can't very well remove that. Are you talking about a magnet cover or something?What changes? Do the T/S specs change, perhaps by removing a vent plug or something?

Subject: Re: driver tweak to King BR box
Posted by Bob Brines on Thu, 01 Jan 2009 17:44:46 GMT
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Wayne,Here is the back of an EX4:And here is the back of a DX3:(Sorry about the scale, but that is all Lowther offers.)Note that under the EXx cover is the complete, unmodified DXx frame, basket, whatever, including the binding posts.As to T/S changes, I doubt that there is any change at the small signal level, but major changes at large signal. I have not measured these. The EXx cover severely damps the back wave. An EXx will not load a resonant cabinet, whereas a DXx works just fine in a MLTL.If you buy a new EXx, you get the lemon squeezer phase plug. New Dxx comes with the bullet phase plug. I prefer the bullet, but YMMV. I would have brought my MLTL's loaded with DX3's to LSAF, but....Bob

Subject: Re: driver tweak to King BR box
Posted by Wayne Parham on Thu, 01 Jan 2009 18:23:04 GMT
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From the looks of it, the EX cover is pretty significant. I expect there may be some changes even at the small signal level. The volume of air behind the cone and the area of the openings forms a

sort of chamber/throat relationship. This will affect the electro-mechanical parameters and it should be readily apparent in measurements. I would definitely measure T/S parameters after removing the cover to know what the modified driver does.

Subject: Re: driver tweak to King BR box
Posted by Bob Brines on Thu, 01 Jan 2009 18:35:50 GMT
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You may be right about the small signal parameters. I took the backs off of my EX2's years ago and don't have a before/after comparison. As always, note that Lowther's published figures are pure fiction. My numbers agree with MJK's for the modified EX2>>DX2. Martin also has T/S numbers for many of the Lowther drivers.Bob

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Subject: Re: driver tweak to King BR box
Posted by Martin on Fri, 02 Jan 2009 15:00:01 GMT
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I have always wondered if you could model the a Lowther EX driver as an undersized bass reflex system, which you then put into a larger resonant enclosure. The potential result could be similar to a double bass reflex system. If this were the case, and the designer mistakenly put the EX driver into a DX cabinet then it would not be too surprising that a non-optimal system was the result. Maybe there would be some advantage gained if the cover was modeled and the designer actually took it into account when designing the enclosure. I don't have any EX drivers so this is pure speculation.
