Subject: Coax in horn

Posted by Zene Gillette on Mon, 03 Jun 2013 01:19:21 GMT

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Hi ... thanks to Wayne I'm making a 12" version of his mid horn.

I will be using my P.audio 12" CX38 coax. I won't need (or want)the compression driver, so will need to do something with the gaping 4" horn. Options seem to be; stuff to kill resonances, cover with dome either attached to cone or just cover horn mouth. Problem there is it's more permanent if attached to cone. Last, make a phase plug.

I'm not expecting this horn to get to more than 800hz if that helps selection.

Before I do something stupid I thought I'd better run it by you guys.

Thanks, Zene

Subject: Re: Coax in horn

Posted by Wayne Parham on Mon, 03 Jun 2013 02:08:17 GMT

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I'm just shooting from the hip here 'cause I'm really not all that familiar with the driver. But can you have a plug machined to bolt in place of the compression driver? And do you have access to a good recone shop in your area? Because I'm thinking you may have more success with a different voice coil cover if you plan to run sans compression driver.

This kind of thing is best done empirically, by building and testing. Use measurements to guide you.

Subject: Re: Coax in horn

Posted by Zene Gillette on Mon, 03 Jun 2013 02:25:07 GMT

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Wayne ... thanks for giving up part of your Sunday.

By plug, do mean something flat or a true pointy phase plug? I can easily turn one from trees. We have plenty here in the Great N.W.(yes, bragging).

And, can I ASSume that just a dust cover attached to cone is of little value?

What is the significance for changing v.c. cover?

I do have a good re-cone shop. I bought speakers there. Cheap plug for Jamac Products, Portland Or.

Subject: Re: Coax in horn

Posted by Wayne Parham on Mon, 03 Jun 2013 03:41:10 GMT

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The wood plug would probably be fine. Just trying to prevent having an unintended hole in the box where the compression driver was supposed to be.

The voice coil cap is usually responsible for radiating some HF sound, especially when mounted on a horn because it is centered. It also serves to "pin" the center of the cone, providing a structural feature. The attachment to the voice coil is one place where it is pinned, the surround is another, and the voice coil cap is a third (unless the cap is glued on the former, in which case there's only two). So anyway, it does have an impact, sometimes a fairly significant one.

Subject: Re: Coax in horn

Posted by Zene Gillette on Mon, 03 Jun 2013 04:36:36 GMT

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Wayne, thx, now I can go to work.

Zene