
Subject: Need suggestions for a lower range horn to mate with new Mid/High horns
Posted by [noviygera](#) on Thu, 25 Jun 2009 19:56:14 GMT

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First off, hello to everyone and to Wayne. Wayne, I had the pleasure of talking to you once on the phone, probably a year ago. We talked about you constant dir. midrange horn. I made one, by the way.

This is my first post here.

I have a DJ/listening system in my basement. Mostly, self made.

(I had JBL 2470 for mids and 2405 tweeter)

Some pictures:

<http://picasaweb.google.com/noviygera/BasementSystem#>

Just recently i installed NEW Funktion-One RES 1.5HS horns.

(I believe I'm the first one in the US to have these!)

Pictures:

<http://picasaweb.google.com/noviygera/FunktionOne#>

My current system:

18" subs on H open baffles (Eminence drivers)

10" Rola on open baffles (really old drivers)

5" RES 1.5 HS (Funktion-One): 25v x 90h degree coverage.

Digital crossover by DBX Driverack PA, 200 HZ, 630Hz.

Eq is "flat" above 600Hz. RES 1.5 HS sound very good this way.

Some eq used for midbass(minor, +/-2db) and subs(some heavy eq below 100Hz).

At this point I would like to move to a mostly horn system, adding a midbass horn to cover up to 600Hz, where it will cross over to the Mid/High horn. I'd like to start by replacing the 10" Rola on open baffle.

So, I'm looking for a Mid bass horn to go up to 600Hz.

Should I make one or get a used one somewhere?

My priority is sound quality over output.

You may notice (in the second link above) I made one constant directivity horn, per Wayne's plans. But I made just one and I think it will not go down to 150Hz like I need.

TWO options I came up with:

The crossover point will be 530 to 600Hz. the RES 1.5 midhigh is 18" x 10" x 9" deep.

Keeping in mind, I'm trying to cover 600Hz and below... Given space constraints of a medium size basement room...

1st option is to get the 10N Pro midbass horn. It 17" x 21" x 10" deep. Freq resp: 250Hz-1.6kHz

<http://www.ddshorns.com/catalog.php?page=DMB10NPro>

I will then need to get an appropriate 10" mid, make a box and mount the midbass horn

UNDERNEATH the Res1.5 midhigh. Seems reasonable.

2nd option is to get one of these: DVB 15H or DVB 15N Pro:

<http://www.ddshorns.com/catalog.php?page=DVB15H>

<http://www.ddshorns.com/catalog.php?page=DVB15NPro>

DVB 15H is 22" x 22" x 5.75" deep, Freq resp: 60Hz - 1.25kHz

DVB 15N Pro is 22" x 22" x 15" deep, Freq resp: 60Hz - 800Hz

both will require a 15" driver instead of the 10" but size wise they are not that much bigger (5" taller)

...and to mount the the Res1.5 midhigh COAXIALLY, in the center of the big horns. Remember, the mid high mouth is 16" x 8", the midbass mouth is 22" x 22". Is this a GOOD IDEA? The question is will the midhigh create a shadow, or block the sound of the midbass driver and horn. Is it worth emulating a single point source or will the drawbacks be too great?

Attaching a sketch of my concept. Will the directivity difference at 500 Hz cause a problem?

-Herman

File Attachments

1) [concept_horn.jpg](#), downloaded 467 times
