Subject: Re: Horn loaded Corona Build

Posted by dawiipgh on Wed, 12 May 2021 13:48:19 GMT

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Hey guys!

It has been a long time but life kind of comes at you from all sides. When lockdown began around March 2020, I knew that I wanted to build a set of large efficient speakers. Four Pi speakers were well reviewed and recommended in a lot of the forums. So, I started poking around and eventually got the plans, crossover, and wave guide from Wayne. Compression drivers from Parts-Express and a set of preowned lightly used JBL2226 woofers from Ebay.

I was unloading several sheets of 3/4" Baltic Birch in May and it started raining so I started unloading faster. Instead of holding the sheets in front of me and walking down the grass hill to the basement entrance, I started walking backwards while sliding the wood on the grass. This shouldn't matter because I was going to true up the factory edge. Anyways, I tripped over my retaining wall and fell backwards with my hand outstretched. I ended up with a compound fracture on my radius at the wrist and a broken ulna at the elbow. So my wife 7.5 months pregnant gets me to the local hospital....

We arrive and my forearm looks like a sine curve and the bone is sticking out the bottom. The triage doctor takes a look at me and says, this might be above our paygrade here so let's get you downtown to where the real carpenters are. They set the bone that night and, in the morning, I have surgery and get external fixators put in.

This recovery with the external fixators goes on for about 6 weeks, then they remove them and open up my wrist again and screw in some plates and put me in a cast. Summer is gone and we have our second kid!

Cast comes off and I start physical therapy. I can't lift more than 3-5 pounds with very little grip strength so running a circular saw or a plunge router are last on my list of priorities. I have a buddy come over to help me manage the uncut sheets of wood and we get some rough circular saw cuts done and I decide to invest into a clamping straight edge.

So, I'm feeling better around February March 2021 (about a year from when this all started) and I start making my cuts in the back yard with full snow gear on. I learned a ton about wood working and clamping glued joints and the unruliness of routers.

After the boxes were built, I settled in on the front baffle and went with the recessed woofer and horn. Then I start on the cutouts for the port. It is an uphill battle, but at every point I'm learning more from the forums here and woodworking You Tube videos.

After the baffle is glued in, I complete an electrical hook up and it is so fascinating how much the enclosure shapes the tone and response of the woofer. I opted for a recessed baffle in order to incorporate a fabric grill in the future. I saw a great inspiration from vintage KLH, Klipsch, etc. and from a forum user here: Jensen. I opted for General Finishes Java Gel Stain and I am experimenting with mixing my own shellac and doing a final top coat with Deft spray Lacquer.

I wanted to push to get this done for my Birthday in April. We now have functional and stained speakers. A few punch list items include installing the fiberglass insulation, installing the gaskets around the horn and woofer (shower pan liner), final shellac / sanding / lacquer finishing, and a stand or feet with a 5-10 degree incline. Future projects include two flanking subwoofers. I currently hooked up a 10" subwoofer with a passive radiator which really changes the depth and heft of the sound. I can only imagine what 2 ported 12's or 2 sealed 15's will sound like! The current subwoofer is an Aperion Audio Bravus 10D. It rolls off around 40 Hz but still provides quite the depth of sound.

I am currently driving the speakers with a PS Audio Sprout 100 and even at 50 watts @ 8 ohms (100 watts @ 4 ohm), this system provides concert level SPLs with enough chest slam to have your HOA contact you.

So now we are a family of four who really enjoy Living Room dance parties. I even got on Ebay to pick up a fog machine, DJ Chauvet Kinta FX and a Scorpion dual laser aerial lights. Quarantine really came at us, but I think we are doing just fine.

Thanks to all the forum members and Wayne for all of the guidance and brainpower in this forum.

-David

File Attachments

- 1) IMG_20210509_121147_193.jpg, downloaded 797 times
- 2) IMG_20210509_121147_312.jpg, downloaded 785 times

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