

Sprague Audio Works



LA112a Plans

SAMPLE PLANS

Full plans can be purchased at:

www.spragueaudioworks.com



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Tools required

- Table Saw
- Router
- Hand held jig saw
- Drill
- Sander
- Assorted clamps
- Optional: Air nailer

Speaker Part

- Woofer
 - Eminence Deltalite II 2512 8 ohm
- Compression Driver
 - Eminence PSD 2002 8 ohm bolt-on
- Crossover
 - Eminence PXB21k6 2 way 1.6K
- Misc
 - Grill, speakon connectors, wiring, feet, metal rigging hardware.

Purchased parts

- Note that various parts can be purchased to assist you if you are unable to make the parts yourself
- Flat pack with all wood cabinet parts (minus horn)
- CNC cut front baffle plate
- Entire pre-built horn assembly
- Entire cabinet – finished or unfinished
- Metal rigging (not included in this set of plans)
- Contact:
 - www.spragueaudioworks.com

Assembly Instructions

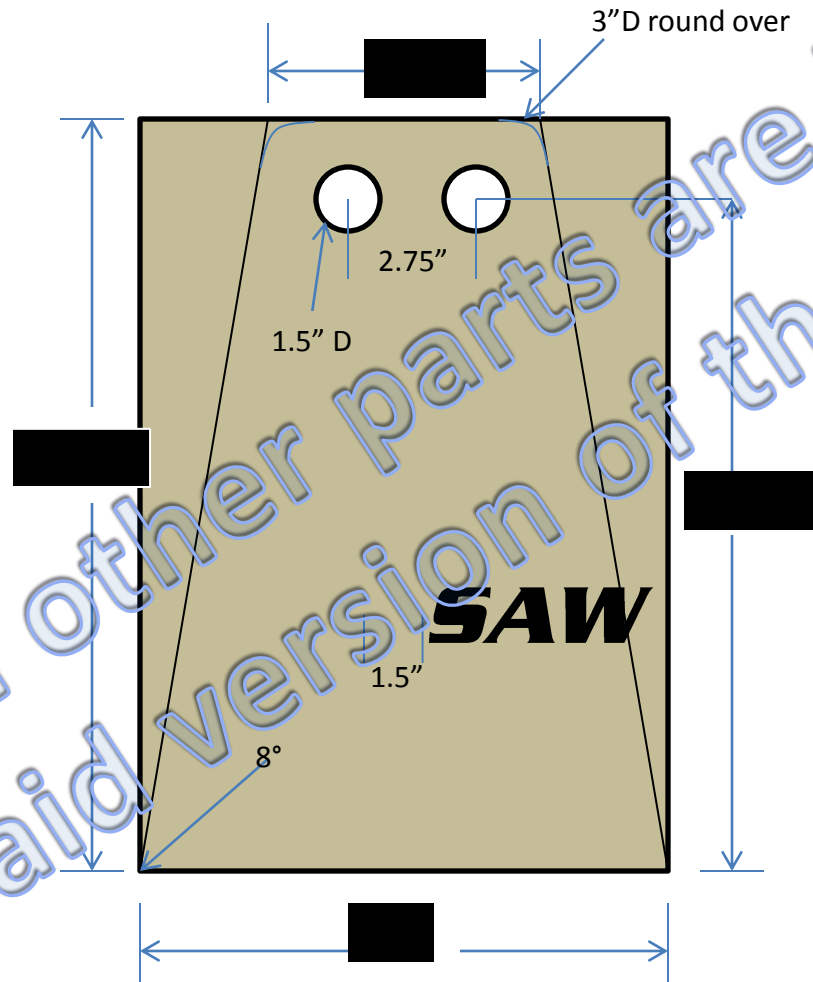
Main Cabinet

- Material:
 - ½” high quality, void free plywood for the cabinet
 - Baltic Birch plywood recommended but will result in each cabinet weighing about 4 lbs more than most other plywood
 - ¼” Baltic Birch Plywood
 - Very small quantity used for the horn mount flanges
 - ¾” Baltic Birch Plywood for the speaker baffle plate.
 - This is critical to be of high quality wood as the woofer will be screwed into this plate

Main Cabinet

- Cut two end panels
 - Cut out the handles in the end panels
 - Optional: This is the time to router out a logo and round over ½ of the inner handle cutouts
- Cut the top and bottom panels
 - Pay attention to the 8 degree angle on the end of each panel
- Cut out the back panel

End Panels x2



Only one panel with emblem per pair
Bottom side will get rubber feet

Box construction photos



Small plate will be used
With exact hole for Speakon
connectors

Ensure everything is 100%
Square or the inner baffle
And horn assembly will
Not fit correctly and
Alignment with the hanging
Hardware will be off.

Note the 8° panel cuts
And alignment here

If unsure at this stage – build
One out of scrap plywood
As a throw away box to make
Ensure all angles and cuts
Are correct.



Use straight – void free plywood. Shown is Baltic Birch plywood.
Glue used is regular wood glue (Titebond II). Air nailer used to hold joints.
Must be air tight!

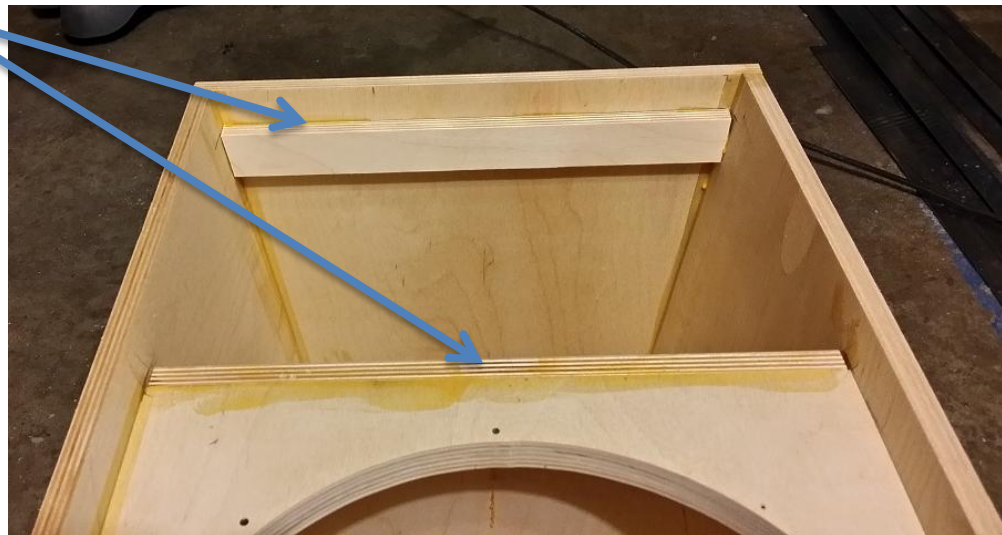
Baffle Photo



Divider Panel photos

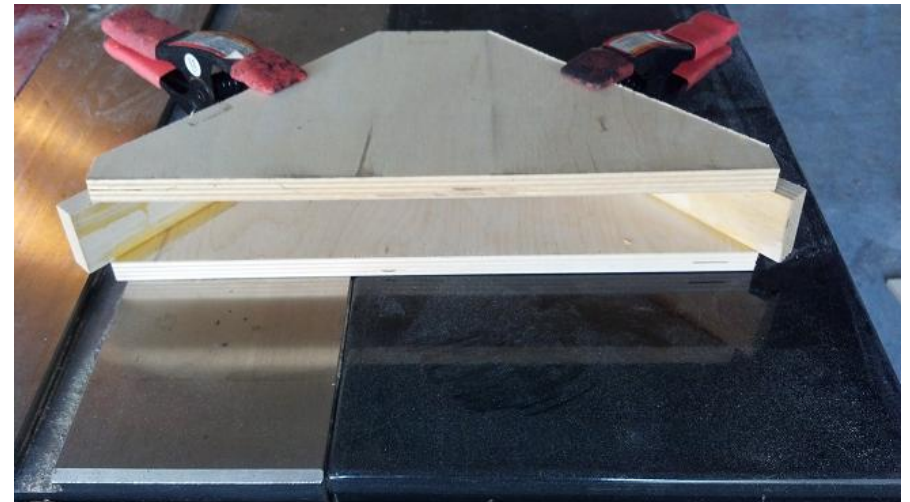
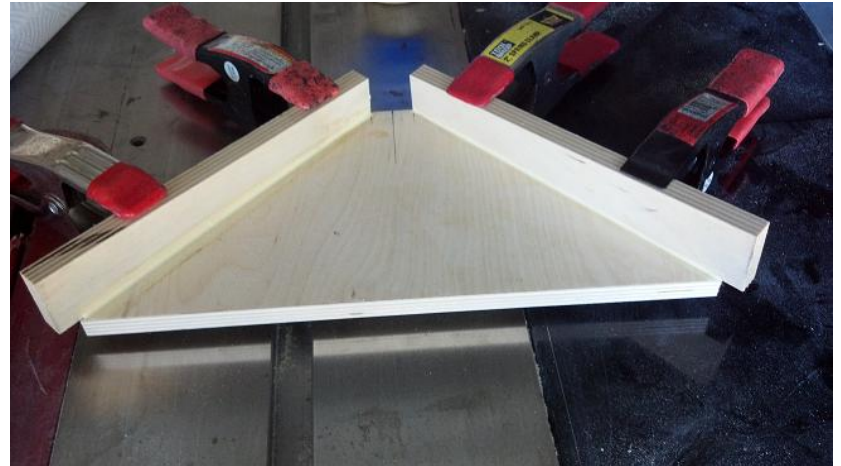
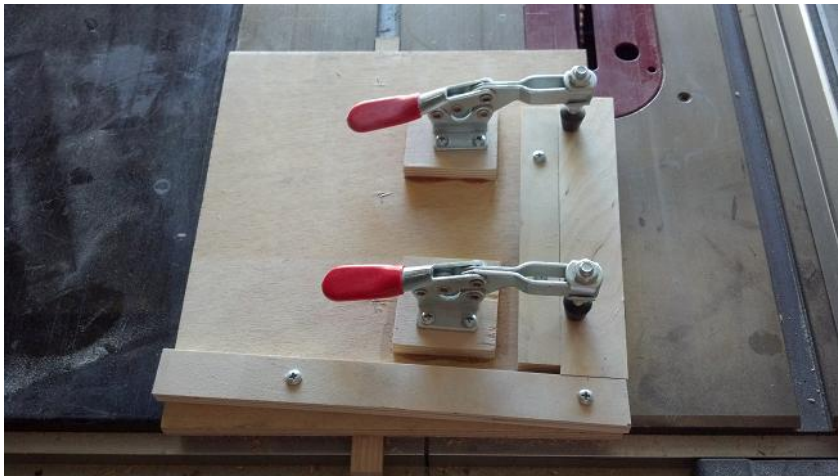


This forms the horn mounting surface and must be 14" from the back with both sides parallel with each other or the horn will not fit correctly and will be under stress when mounted

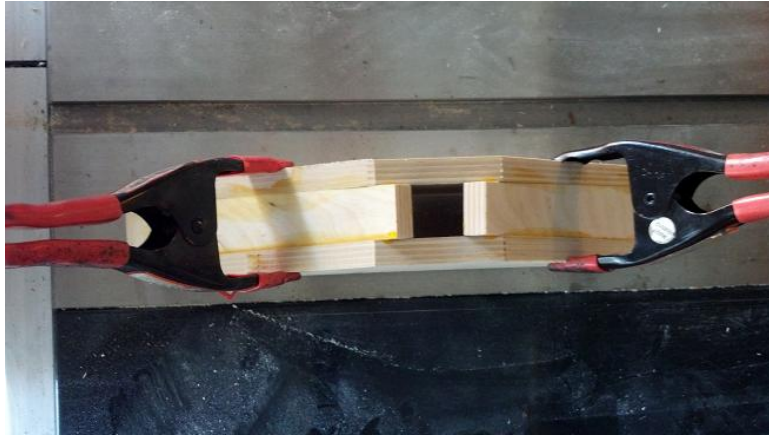


Horn Construction Photos

Jig to cut the horn part **A** safely on a Table saw. This has a 1" to 1 ½" flair with A 2° bevel



Compression Driver Flange Trimming



Horn Assembly

Reinforcement
Panels – cut to fit



Final assembly cut with
table saw at 8 degree angle

Horn Assembly Fit Check



Horn Assembly

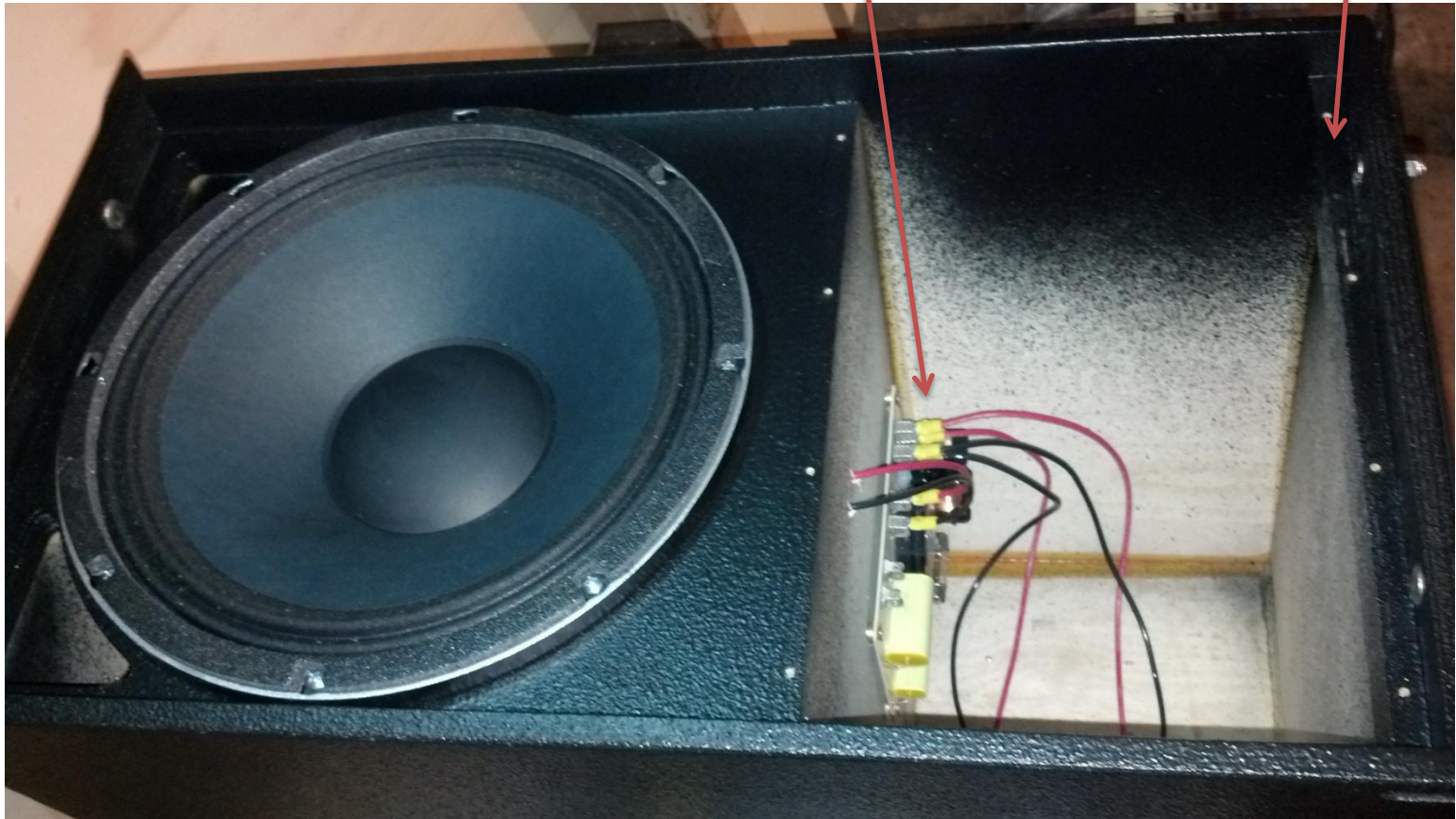
Note: this entire horn assembly can be purchased:

www.spragueaudioworks.com



Place crossover in back to
allow for Compression
driver clearance

$\frac{1}{2}$ " strip 1 $\frac{1}{2}$ " to mount
Horn - level with baffle
And divider panel



Final photos

