Stingray Work/Test Stand Instructions & Plans

This is my design for a simple work/test stand for the Parallax Stingray. I have kept it as simple as possible to allow for ease of construction. I have used ¼ MDF (Medium Density Fiberboard) through out, but you could use other materials as well. I decided that it was time to spruce up my stands so I painted the work/test stand with Rustoleum Professional Black Gloss paint. I really like this paint and think it is worth the extra money. Below I have provide a bill of materials and their sizes along with simple instructions and plans.

REMEMBER work safely and always wear safety glasses!

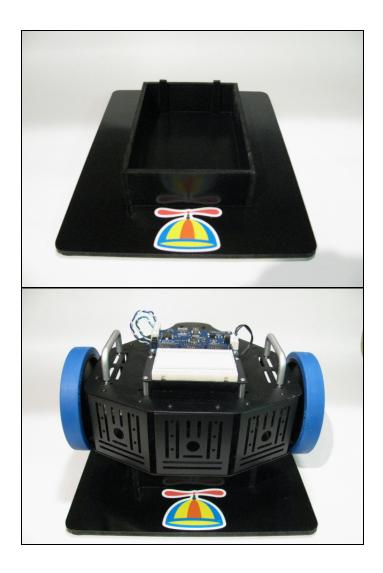
Part	Length	Width	Height	Material
Base	14"	11"	1/4	1/4 MDF
Long Side	8 ½"	2"	1/4	1/4 MDF
Short Side	5 1/4"	2"	1/4	1/4 MDF
Vertical Stops	2 1/4"	3/8"	1/4	1/4 MDF
Self Adhesive Feet			1/4	Rubber

Building Instructions

- 1. Cut all pieces to size as shown on the plans and in the bill of materials
- 2. Assemble the long sides to the short sides with glue keeping the short sides inside of the long sides (see plans) keeping the assembly square. You can use clamps to hold the assembly till the glue dries. I used what is known as a pin nailer. I purchased mine a Harbor Freight for around \$20 on sale. Placing the assembly on a flat service with a little weight will help the assembly to dry flat.
- Next place the above assembly on the base making sure it is center by moving it till you have equal measurements from opposite sides
- 4. With a pencil mark the location of the centered assembly.
- 5. Now apply glue to the assembly and using the marks you made in the previous step glue the assembly to the base. Again, placing some weight on top will hold the assembly to the base until the glue dries.

- 6. When the glue dries it is time to glue in the vertical stops to the inside of one of the short sides. Note their position on the plans.
- 7. When the work/test stand is dry sand the whole assembly and paint it up.
- 8. Don't forget the Propeller sticker! Not only does it look cool it make your robot go faster.

Completed work/test stand



Entire work/test stand made of 1/4 MDF (Medium Density Fiberboard)

