

# Quantum Qubit Assembly Instructions

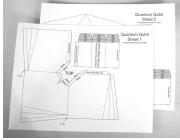
Specifications: Height: 3.75 inches (10 cm) - Span: 6 inches (15 cm) - Weight 0.5 oz (12 grams) Recommended motors:

18mm version: A8-3, B4-2, B6-0, B6-2, C6-0, C6-3 24mm version: C11-0, D11-P, D12-0

Additional Materials and Tools needed: White glue, #11 Exacto® knife, metal ruler, scissors

#### Tips:

- Read all the instructions first before starting.
- Test fit all parts before gluing them together.
- Don't use too much glue. A thin layer of glue will make a stronger bond and will dry quicker.
- Cut the straight lines with a #11 Exacto® knife and a metal ruler.
- The folds are made easier by running a ballpoint pen firmly along the dashed lines using a ruler as a guide.
- Make all folds as straight and sharp as possible.





#### Assembly:

The first thing you must do is decide which version, 18mm or 24mm of the Quantum Qubit you want. This will determine which motors you can use and what lines to cut on during assemble. There are more different motors for the 18mm version, they are cheaper and generally more available. 24mm motors are generally more powerful which will mean higher flights.

The pictures in these instructions are for an 18 mm version. Most of the steps are the same for both versions.

- 1. Crease the all the dashed lines using a dried up ball point pen and a ruler. This will make the folds much easier.
- 2. Cut out the TOP from Sheet 1, cut only on the solid lines. For the 18mm version cut on the line marked "18mm".
- 3. Carefully fold on the dashed lines as shown in the pictures, with the printing on the inside.
- 4. Spread glue evenly on the gray area marked "TOP Glue" and fold the TOP with the printing on the inside. Make sure the Glue tab lays flat. The Top should be in the shape of a partial box.
- 5. Cut out the BOTTOM from Sheet 2. Cut out the triangular Motor Mount and Launch Rod holes.
- 6. Fold the large triangular sections up, towards the printed side.





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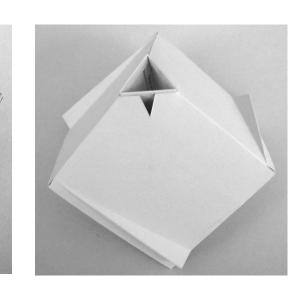
- 7. Test fit the TOP and BOTTOM together. Make sure the Launch Rod Hole in the TOP lines up with the Launch Rod Hole in the BOTTOM. Three, triangle-shaped "spin fins" will be formed on trailing edge of each side.
- 8. Spread a thin layer of glue evenly on the back of one of the triangle shaped tabs on the BOTTOM and glue the BOTTOM to the TOP. The trailing edges on the TOP and the Bottom should line up.
- 9. Glue the other two triangle shaped tabs on the BOTTOM to the TOP as in Step 8.
- 10. For the 18mm version, cut out the 18mm MOTOR MOUNT from Sheet 1, otherwise cutout the 24mm MOTOR MOUNT from Sheet 2.
- 11. Fold on all the dashed lines.
- 12. Put a small amount of glue on the front (printed side) Tab 1A and spread it out thinly and evenly.
- 13. Fold Tab 1A over onto Tab 1B. Make sure it is flat and allow the glue to set. If you don't use too much glue the joint should set almost immediately.
- 14. Spread a small amount of glue thinly and evenly on Tab 1C.
- 15. Fold the combined Tabs 1A and 1B over onto Tab 1C. Make sure they are flat and allow the glue to set.
- 16. Repeat steps 12 through 15 for

Tabs 2A, 2B and 2C and then for Tabs 3A, 3B, and 3C.

17. Form the MOTOR MOUNT into a triangular tube.

Quantum Qubit

- 18. Spread a small amount of glue thinly and evenly on back of the glue tab and press it against the inside of the MOTOR MOUNT. Make sure it lays flat against the entire length of the tube and the glue is set.
- 19. Insert the MOTOR MOUNT into the Motor Mount hole in the BOTTOM. Slide it up until it just pokes out the hole in the TOP.
- 20. Put a fillet of glue around the MOTOR MOUNT where is joins the TOP and another fillet of glue where it sticks through the BOTTOM.
- 21. Spray the rocket with 2 light coats of clear enamel to protect it from moisture.













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Flight preparation: Insert a motor into the MOTOR MOUNT. If the motor is too loose, wrap masking tape around it until it fit tight enough not to fall out.

To prevent the possibility of a fire, put a ball of recovery wadding in the forward end of the motor and hold it in place with masking tape.

To prevent burning of the rocket from the motor exhaust, support the rocket 6" or more above the blast deflector with a clothes pin

Recommended Motors: 18mm version: A8-3, B4-2, B6-0, B6-2, C6-0, C6-3 24mm version: C11-0, C11-3, D11-P, D12-0, D12-3

Limitation of Liability: Model rockets are not toys. Model rockets are functional rockets constructed of lightweight materials and launched using pre-manufactured, NAR safety certified model rocket motors in accordance with the NAR Model Rocket Safety Code. Model rockets, if misused, can cause injury, property damage and even death. Art Applewhite Rockets certifies that it has exercised reasonable care in the design and manufacture of its products. Once sold, we cannot assume any liability for product storage, transportation or usage. Art Applewhite Rockets shall not be held responsible for any property damage or personal injury whatsoever arising from the handling, storage, use or misuse of our product. The buyer assumes all risks and liabilities there from and accepts and uses Art Applewhite Rockets products on these conditions.