

Light RC Indoor Slick

- (1) Color Plane
 - (2) Insert Spars
 - (3) Separate Panels
 - (4) Bevel Panels
 - (5) Hinge Controls
 - (6) Assy Horizontals
 - (7) Attach Lower Fuse
 - (8) Add 1mm Struts
 - (9) Install Gear Legs
 - (10) Attach Upper Fuse
 - (11) Add 1mm Strut to Rudder
 - (12) Install Foam Gear Leg/Pant
 - (13) Attach motor Mount Tubes (hot glue)
 - (14) Glue Fuse Nose Bracing
 - (15) Secure Control Horns
 - (16) Put in Electronics
 - (17) Install Control Rods Pull-Pull Line
 - (18) Install Battery / Set CG (@spar)
 - (19) Install Prop, Do Preflight Checks
- Be Safe, Have Fun

1) Color Plane

Common methods include markers, spray paint(foam safe, test first), and ink (solvent based, test first)

2) Insert Spars

Cut spars to length, use the 3mm flat strips. Slide the spar through spar slot to insure fitment before applying glue. Glue carbon spars into wing and elevator. Hold foam against spar while glue sets.



3) Separate Panels

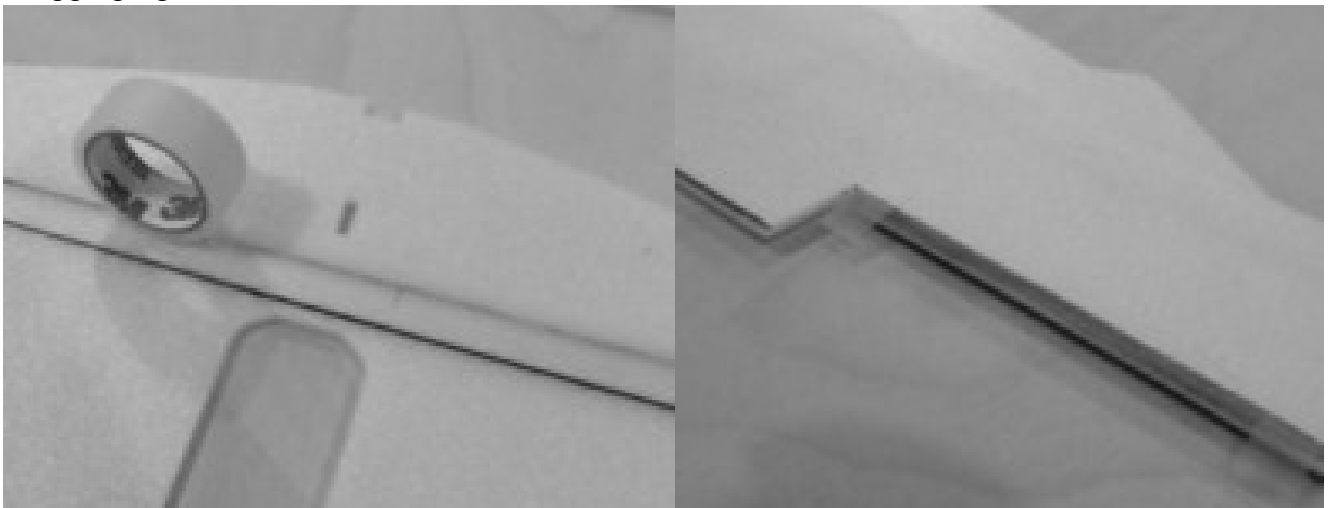
Some plane kits require separation of control surfaces, wheel pants, etc. Also most kits will have tabs needing removed, these items are left to make parts stronger during shipping and handling. Leave as many tabs attached as possible during coloring.

4) Bevel Panels

Indoor planes will typically have only underside of panels beveled on the ailerons and elevator. The rudder can be beveled either on one side or both.

5) Hinge Controls

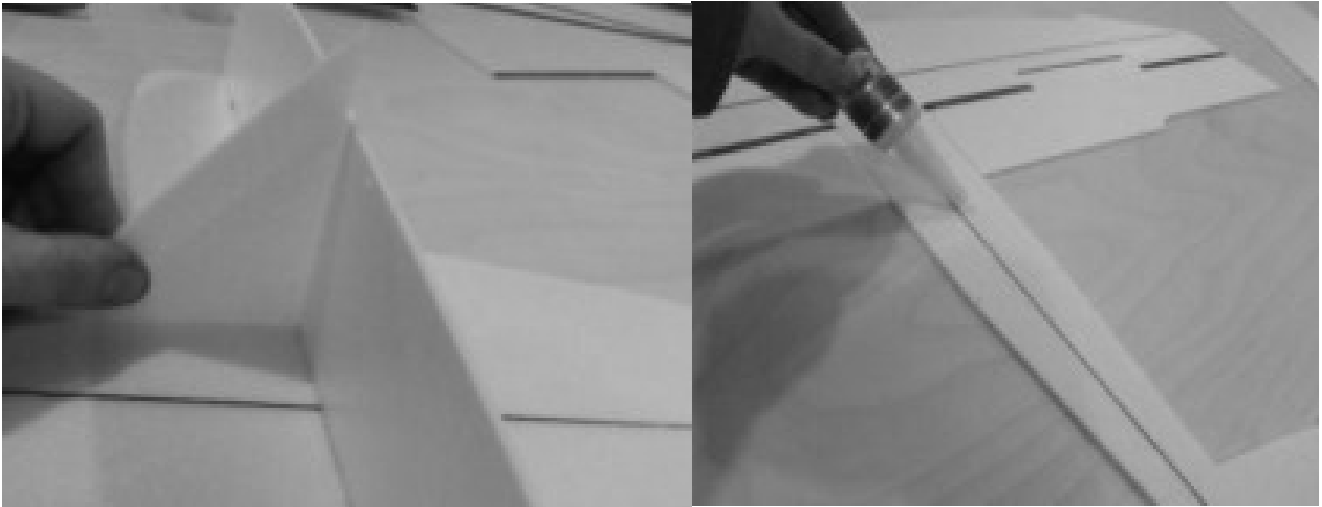
Hinge ailerons and elevator, lay panels flat on table, beveled side down, butted against adjoining panels. Tape across entire hinge, flip and tape in only a few places with about a one inch strip perpendicular to hinge. After hinging slip a knife blade between panels where dragging against each other.



6) Assy Horizontals

Flat on a table glue the horizontal panels to each other. Take care to orientate hinges the same if single bevel hinges are used.

7) Attach Lower Fuse



If single bevel hinges are used place the beveled side up to expose the bottom of the horizontal panels. Test fit the lower fuse before adding glue. Check for 90° using a square, glue while checking for squareness periodically.

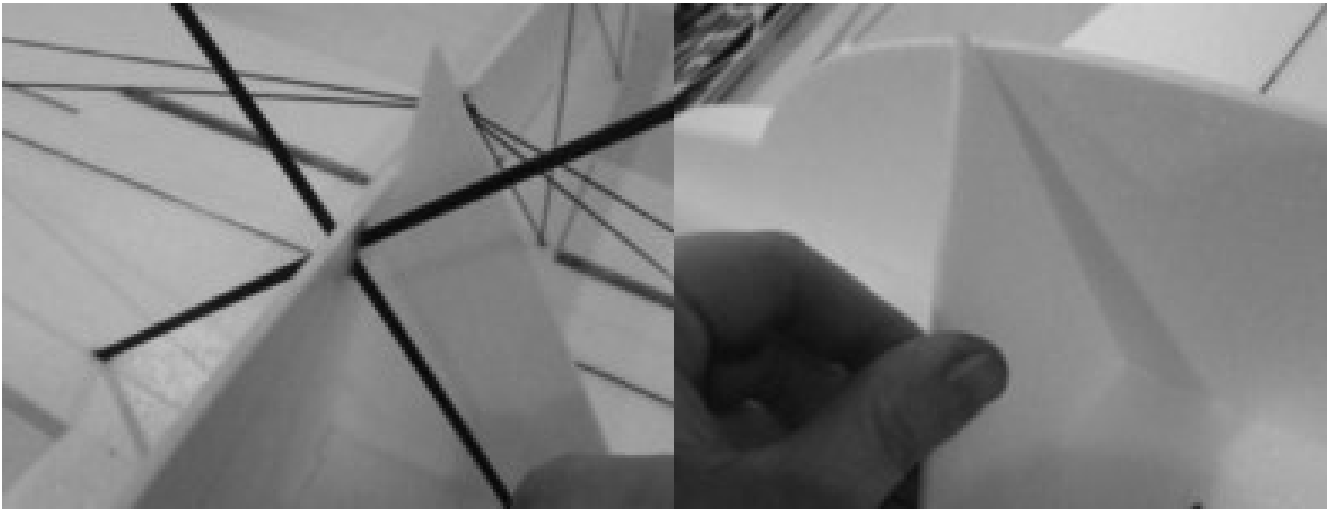
8) Add 1mm Struts

Small holes are cut in the foam to help you position the carbon struts. Slide struts into position and cut, leaving a small amount longer than needed. At shallow angles (on wings) press the carbon into the wing to keep it from bowing. At intersection where carbon crosses through fuse pinch the carbon to remove bowing. Glue ends at horizontal panels only. When all lower struts are in place check square and glue at lower fuse. Keep checking square while gluing at each intersection. After gluing trim struts for appearance.



9) Install Gear Legs

Cut gear legs (3mm flat carbon) to 9" long. Cross through the lower fuse into the wing, glue at wing only. Check square and glue at lower fuse. Of course these are optional and often not used.



10) **Attach Upper Fuse**

Test fit upper fuse to plane, check square, and glue.

11) **Add 1mm Strut to Vertical Stab Install Rudder**

On this step you should instal a carbon strut between the vertical stab and the horizontal stab.

Pass 1mm strut through vertical stab cut leaving length to trim later. Glue at horizontal stab, check square, and glue at vertical stab. Tape one side of rudder hinge on flat surface. Touch the hinge points together and then fold tape around to complete hinge. Fold rudder over tape and tape apposing side of hinge.

12) **Install Foam Gear Leg/Pant**

If your model comes with wheel pants you can choose to instal them now. Test fit foam gear leg to fuse, glue at fuse then glue foam to carbon leg. Test fit wheel pant to brace and leg, then glue. Make sure to keep the leg panel parallel to wing when gluing to fuse. When test fitting wheel pant check that it is vertical, trim if needed.

Insert carbon into tail for skid.

13) **Attach motor Mount Tubes**

Align motor mount and transfer hole locations with a marker. Mark fuse to cut slots for motor mount tubes. Glue tubes to fuse using epoxy or low temp hot glue.



14) **Glue Fuse Nose Bracing**

If your model comes with nose bracing you can choose to instal this now. Test fit to underside of fuse, longer end goes up, mounts flush to front of fuse. Beveling the nose braces will increase bonding area (optional).

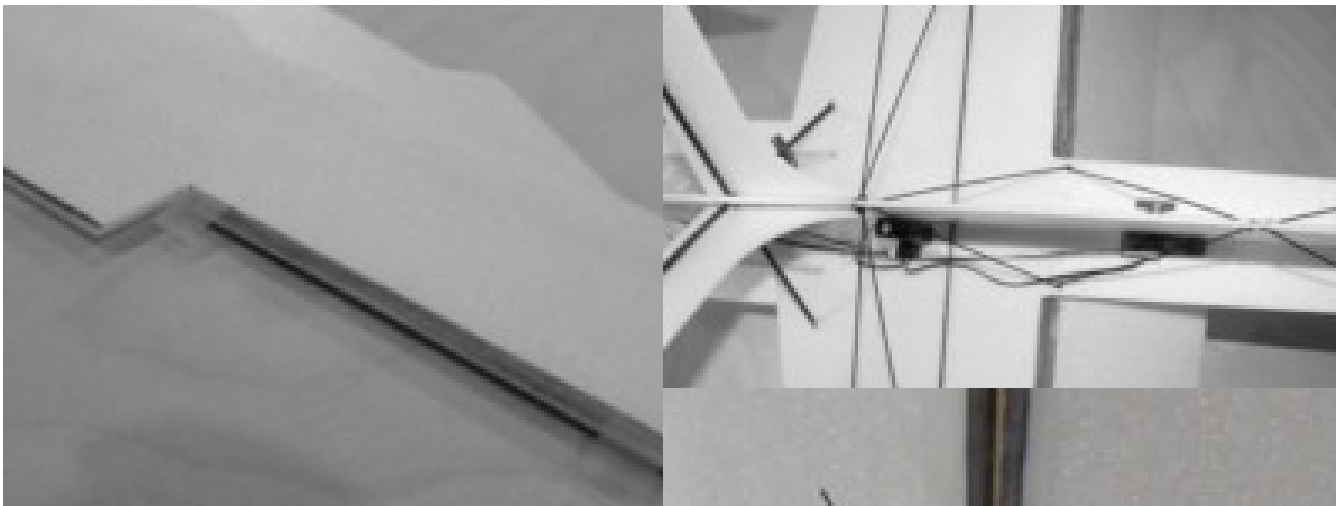


15) **Secure Control Horns**

Glue in control horns, use a left over piece of 1mm carbon, or a tooth pick to apply glue. Do not glue over holes!!!

16) **Put in Electronics**

Mount motor, ESC, RX, servos, leaving servo horns off until after powering up. Be sure no trims or mixing are active during setup. Leave servo horns screws out far enough to slip pull-pull under the head of screw. The aileron servo goes in sideways and then rotates into position.



17) **Install Control Rods Pull-Pull Line**

Build control rods using 1mm carbon for ailerons, making z-bends, and attaching with self adherent shrink wrap. Taping the ailerons into place can make the job easier. Heat wrap out of plane for first z-bend, attaching this to the servo. Lay metal under the second joint while heating to protect the foam. A razor, thin



saw, or even foil works well. Stainless steel is a better choice than steel or aluminum. Install pull-pull line by routing through hole in the following order:

pinch hole
control horn hole
servo horn hole
around servo screw
servo horn hole
control horn
pinch hole horn

Pull line at pinch hole to tension and lock into place, do the same at both ends. Once a slight tension is achieved, power up system again. With the servos centered, center the control surfaces, then tighten the servo horn screw onto the control line enough to keep the line from slipping. If you find the line needs adjustment then loosen the screw and adjust.

18) **Install Battery / Set CG**

Find appropriate placement for battery mounting that meets CG requirements. CG to be set $\frac{1}{4}$ " in front of wing spar.

19) **Install Prop, Do Preflight Checks**

Check motor spinning direction, check CG, check servo for reversed throw. Weigh the plane, take a picture, charge up your batteries, BE SAFE!!! HAVE FUN!!!

Thanks,
Light RC

