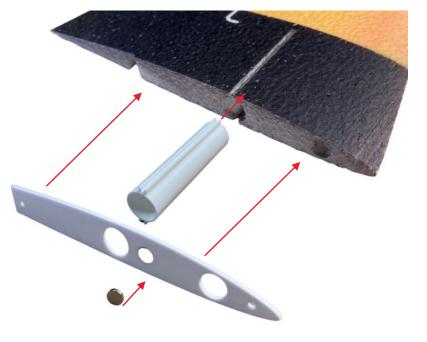
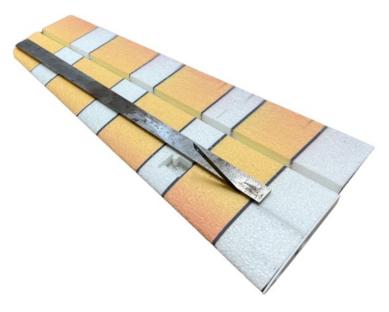


## 2. Wing



#### 1. step

- Insert the magnet into the rib and glue it with CA glue. The magnet should be completely tucked in and should not protrude outside the rib.
- Glue the spar casing into the slot in rib with medium CA, paying attention to the correct orientation of the case, which has to be on the correct side.
- Attention rib and cases are not symmetrical!
- Join the parts with the help of medium CA, insert, and glue to the wing, making sure everything fits and the rib is aligned.

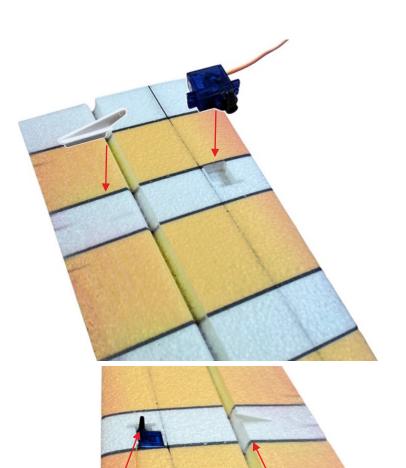


#### 2. step

- Using a metal ruler and a sharp, fresh cutting blade, make a notch on both sides of the wing for the carbon rods.
- The notches for the carbon rods, including the plastic "casings", should be 500 mm long.
- The end of the 500 mm notch should be 25 mm from the leading edge at the outside end of the notch -this will ensure a flat cut.
- Attention Make identical cuts on both sides of the wing.



- . Insert the 1.5  $\times$  500 mm carbon rods into the cut grooves. Press so that the rods do not protrude above the skin of the foam.
- With thin CA, ideally with an injection needle, glue the carbon rods thoroughly, making sure that the wing remains straight while gluing.



- Insert and glue the control horns into the prepared slots.
- Place and screw a single-arm servo horn into the already centered output shaft, which should be facing the tip of the wing.
- Insert and glue the servo with the already centered one-sided arm.

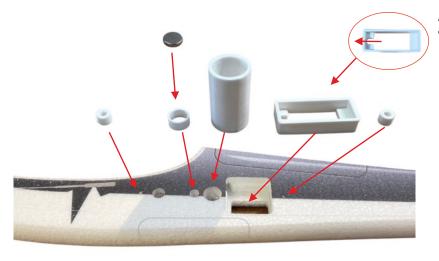
- With a sharp cutting blade, make another incision, this time for the servo cable.
- The notch will point at the hole in the rib, through which you will pull out the servo connector.
- Prepare the pushrods glue the plastic clevis to one end of the 1.8 x 45 mm carbon rods, and glue the threaded metal couplers to the other end.
- Screw the second clevis onto the threaded metal coupler. Adjust the length so that the servo arm is perfectly perpendicular, and the aileron is in the neutral position.
- Secure the clevises.

## 2. Fuselage



#### 1. step

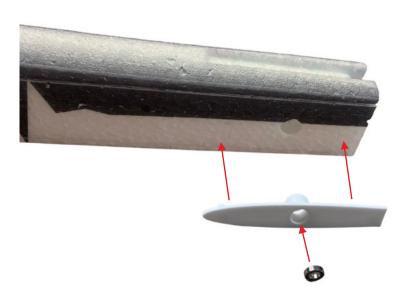
- Insert the 1 x 830 mm carbon rods in the preprepared grooves on both sides, and the plastic bowden 2/1 x 590 mm on the right side.
- Press the carbon rod and bowden so that they do not protrude from the fuselage. Glue with thin CA, while making sure the fuselage remains straight.



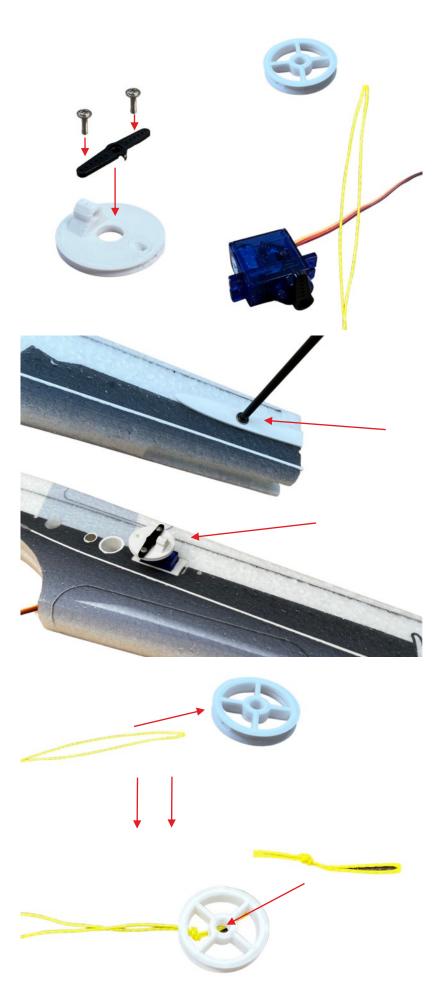
- Insert the magnets into the round casings so that they do not protrude; glue with thin CA. Be careful, they must be placed with the opposite pole facing outwards compared to the wing so that they attract the wing to the fuselage.
- With the fuselage on its right side and the nose looking left, carefully glue the components to the left side of the fuselage, so that they are flush with it and do not stick out.
- Lastly, glue the servo frame so that it is at the bottom edge of the cutout (the fuselage is laid on the right side) and the cable output groove is facing towards the nose.
- Glue the other two small cases and the case with the magnet to the other side of the fuselage as indicated above.



- Take the rib with the bearing housing, and insert the ball bearing.
- Insert the bearing so that it is at the same time flush with the edge of the fuselage and does not protrude outward
- Glue the rib fitted with the ball bearing into the fuselage using medium CA. Make sure to align it perfectly horizontal -follow the fuselage painting lines
- Repeat the procedure for the other side of the fuselage.



## 3. Elevator



#### 1. step

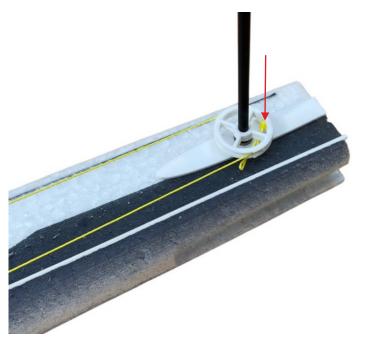
- Secure the doubled-sided servo horn to the large pulley with two screws.
- Next, prepare a 120 cm long cable, the small pulley and a servo, which will be placed in the center.

#### 2. step

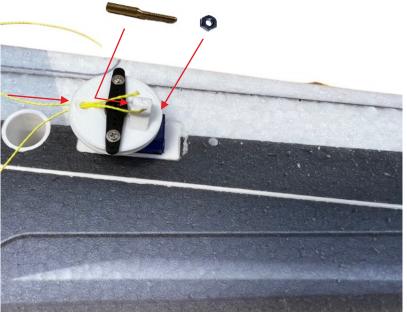
- The next steps are all performed on the fuselage resting on its left-hand side and working on its right-hand side.
- Insert the 4/3 x 330 mm tube into the ball bearing in the right-hand side elevator rib.
- Insert the elevator servo into the recess in the righthand side of the fuselage with the pulley installed.

#### 3. step

 Push the cable through the hole in the small pulley so that you get two sections of the same length.

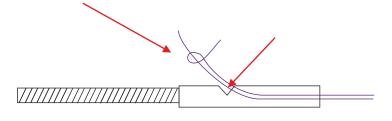


- · Place the pulley with the cable on the carbon tube.
- Turn the pulley to the correct position, so that the hole in the pulley faces backwards.
- Secure the knot with a drop of thin CA.

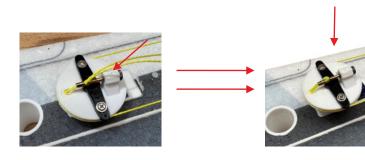


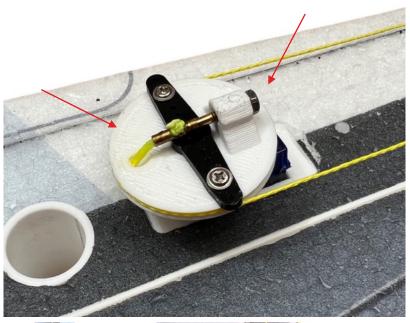
#### 5. step

- Pull both ends of the cable through the hole in the large pulley, making sure that they exit above the pulley.
- Insert the 1.5 mm threaded coupler into the pulley, and secure it on the opposite side with an M2 nut.

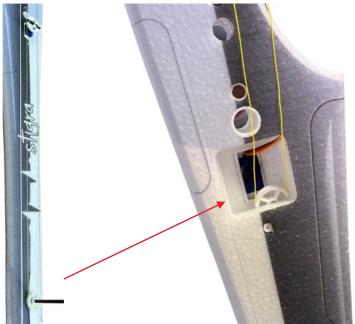


- Use a file to make a notch in the tubing of the threaded coupler to enable the cables to be pulled through it.
- Thread both ends of the cable into the tubing and pull them out through the notch in the tubing.
- Stretch the cable, tie a knot, and secure with thin CA.





- Pulley cables can be easily tensioned by turning the nut on the threaded coupler.
- Make precise adjustments at the end of the assembly process so that there is no play in the elevator before the first flight.
- ATTENTION! Changes in temperature may cause loosening. On colder days, we recommend checking before flying and possibly tightening slightly.



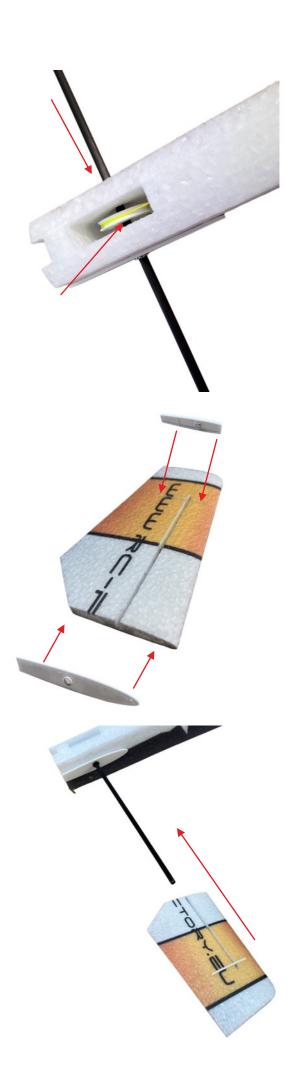
#### 8. step

- The entire elevator drive in now ready to be installed.
- First, remove the servo and the two pulleys with the cable.
- Turn around the fuselage, because now we will start working on the left-hand side of it.
- Insert the elevator servo from the left-hand side of the fuselage so the shaft can be seen from the lefthand side of the fuselage. The servo cable should face towards the forward end of the fuselage.
- Slide both pulleys with the cable through the servo mounting hole, being careful not to entangle the pulleys.



Secure the servo with a drop of CA glue.



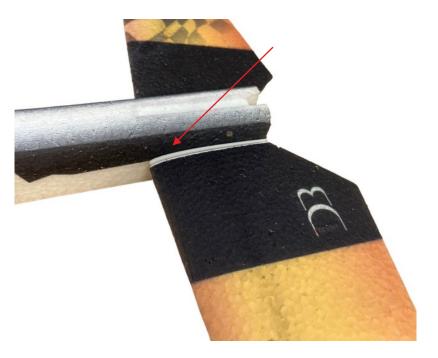


- Push the carbon tube -which was inserted on the right-hand side elevator rib- through the small pulley and out the left-hand side rib hole, ensuring that the carbon tube extends equally on both sides, also making sure that the pulley remains in the center of the fuselage.
- After inserting the tube, check that the knot is facing to the rear, exactly as we had it in Step #4.
- Using thin CA with a needle, glue the small pulley to the tube, being careful not to let glue into the bearing.

#### 11. step

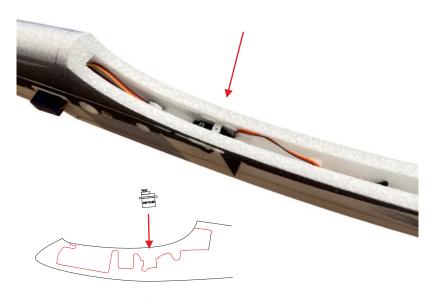
- Glue all plastic ribs in the elevator halves.
- Make sure that the elevator halves are aligned.

- · Slide both elevator halves onto the carbon tube.
- Ensure the tube inserts through both plastic ribs towards the tips of elevators.



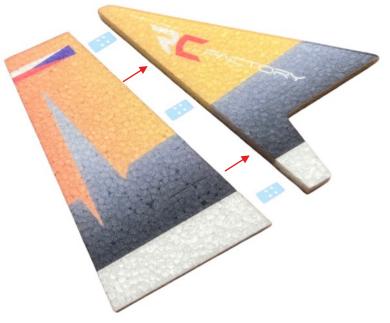
- Align simultaneously both halves of the elevators with the ribs on the fuselage (in which the bearings are inserted).
- A correct alignment of the elevator surfaces is achieved by aligning both elevator halves with the ribs on the fuselage. Fix them using the middle second.
- Glue the carbon tube in the elevators along their entire length with medium CA, making sure that the glue does not flow into the bearing and that the elevators can move smoothly.

## 4. Rudder



#### 1. step

- Insert the servo into the prepared slot and secure it with glue.
- With a centered servo, put a two-armed servo horn.
   One side will be used with the rudder push rod and the other for the tow hook.

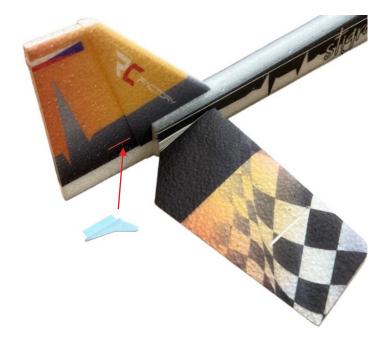


#### 2. step

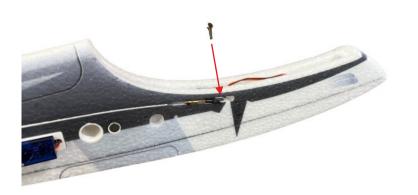
- We will use a scalpel to both parts of the direction indicator hinge cuts
- We will carry out the loads so that the hinge is on the axis direction indicators, extreme hinges 15 mm from the end and middle hinge in the middle of the rudder
- We glue on both sides with thin CA
- We make sure that she finds enough villas for us for moving the turn signal to extreme positions



- We will now glue the rudder with glued hinges to fuselage
- We use medium CA and be careful when gluing so that all the sheets are connected and the rudder is perpendicular to the plate

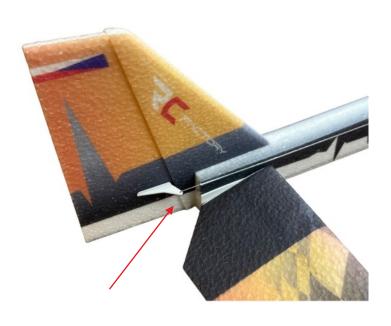


 With the help of medium CA, we glue the plastic glue to prepared grooves in the direction, so that they are fitted the lever landed on the turn signal



#### 5. step

- Let's prepare the turn signal drive, which consists of steel strings, threaded ends (Imm) a plastic forks with Gep
- We slide the steel string into the end, and glue it and squeeze with pliers
- · We screw the plastic fork a on the end
- We pull the entire rod through a plastic bowden and to the end direction finder
- · Place the fork on the servo pack and secure it



- We have the grinding servo pack in the neutral room position and now we will set the correct length of the tie rod
- Put the rudder in the neutral position and the place where the hole is in the pace, we bend the pull to true debt (In order to be more precise, let's omit I mark the given place with a marker and then the exact one bend with the help of pliers)
- With this, we have set the length of the drawbar, only now we pull the rod through the steering lever

## 5. Canopy

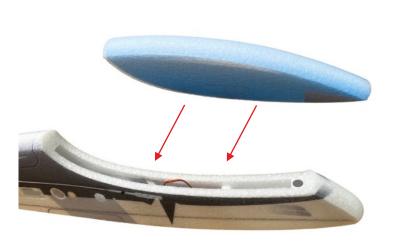


### 1. step

- · We stick a 10x3 magnet into the plastic frame
- Glue the frame with the magnet to the front part canopy
- We stick a plastic 'tongue' in the back of the canopy and that's it so that 1/3 protrudes, see the bottom picture

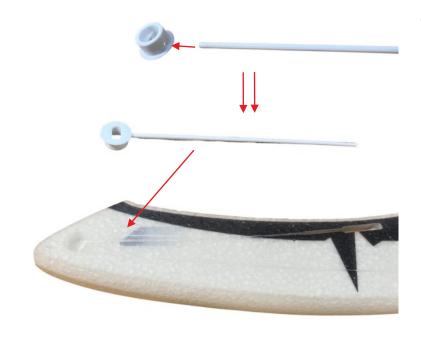


- We stick a 10x3 magnet into the plastic strap
- We glue the frame to the front of the fuselage and at the same time
- We take care that the polarity of the magnet is such that attracted by the magnet in the canopy



- We push the canopy forward with the tongue
- Before the flight, we will check whether the cabin is for us so far in all cities, or whether if and? Vs hold the canopy

## 6. Tow equipment



#### 1. step

- We glue the bowden into the hole in the infused device using thin CA
- Insert the glued parts into the previously prepared ones opened in the fuselage and we seal with thin CA. Be careful that the glue does not flow into the bowden



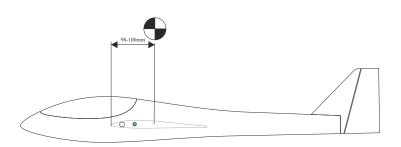
#### 2. step

- Let's prepare a steel wire rod, threaded end caps (1 mm) and plastic forks with éep
- We glue the threaded end on the steel wire and on.
   Here we screw the plastic fork on
- We pass the "string" through the bowden and into the plastic bag father and secure the fork on the servo pack with the help of pin (we use the second hole in the pace servo from edges)



- Let's shorten the rod so that at full right deflection the rudder was fully fitted to the entry cable unlocked
- On the other hand, when the position is in neutral, the pull must be through both holes as in the previous photo

# 7. Center of gravity



### 1. step

- Before the first flight, check the model's center of gravity
- We recommend 98-100mm from the leading edge of the wing at the root



We wish you many happy flying hours!!!

Team RC Factory