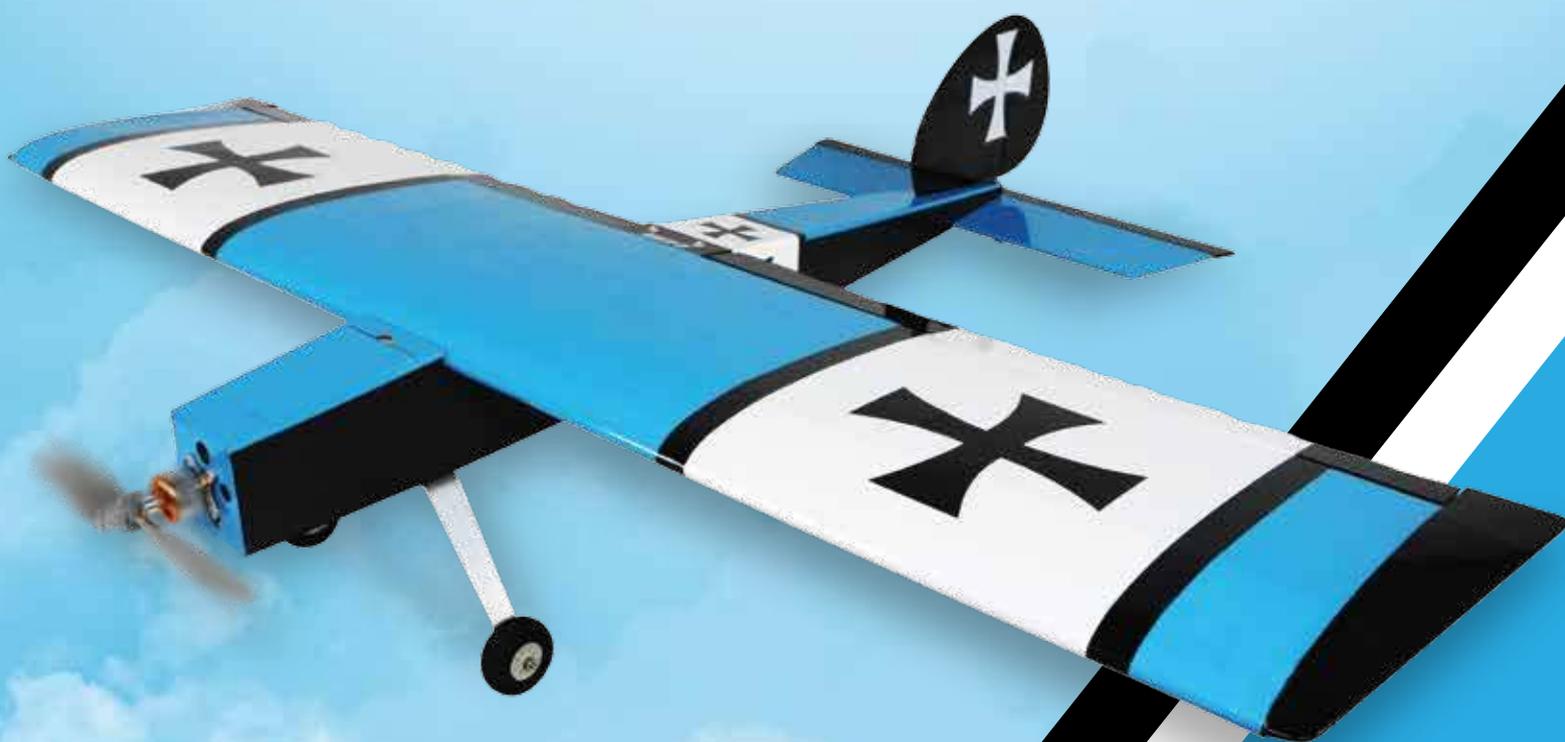


# Crusader 30E

## Instruction Manual



### FEATURES :

- ◆ All balsa and light plywood construction.
- ◆ Easy to fly and with excellent flying characteristic
- ◆ Large battery compartment for easy swapping batter packs between flights.
- ◆ Strong yet light aluminium landing gear is included.
- ◆ High quality covering films with high contrast colour scheme design.
- ◆ Full sets of high quality hardware are included.

### SPECIFICATIONS :

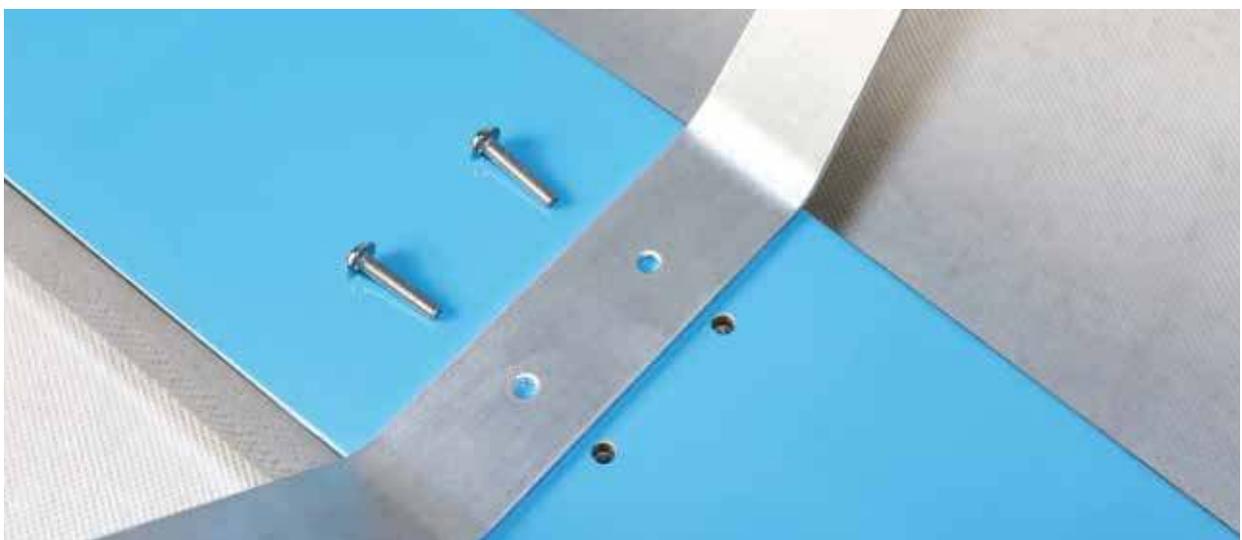
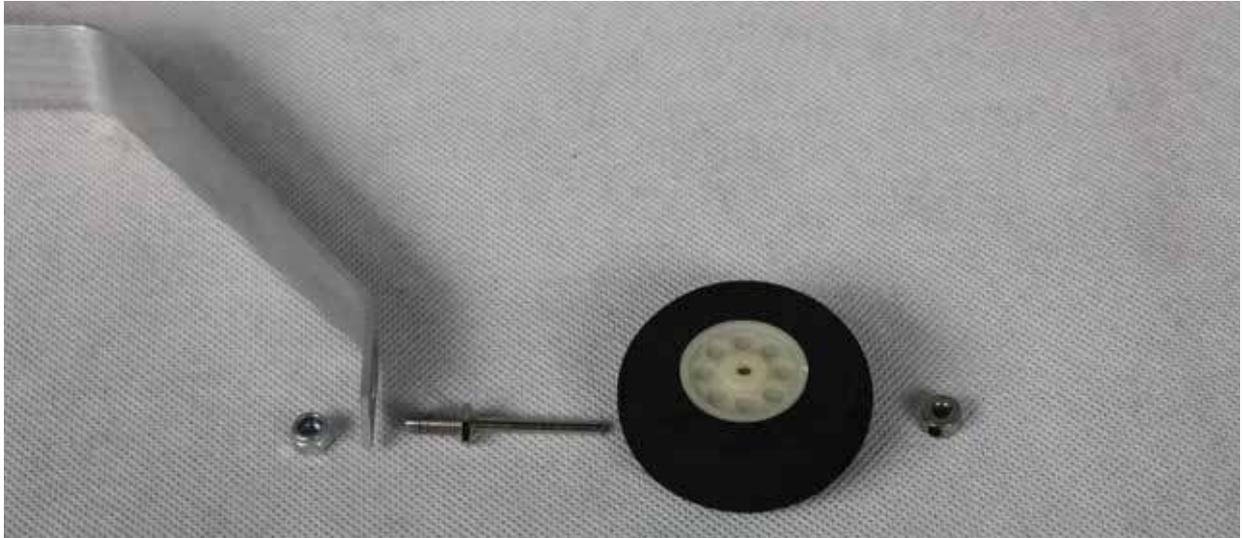
- ◆ Wing span: 1200mm
- ◆ Length: 1000mm
- ◆ Flying weight: ~990 grams
- ◆ Motor: 2216 KV980 (Recommend)
- ◆ ESC: 30A with BEC
- ◆ Servo: 9 grams x 4 pcs
- ◆ Propeller: 10 x 5
- ◆ Battery: 3S 2300mah (Recommend)

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## **SAFETY INSTRUCTIONS**

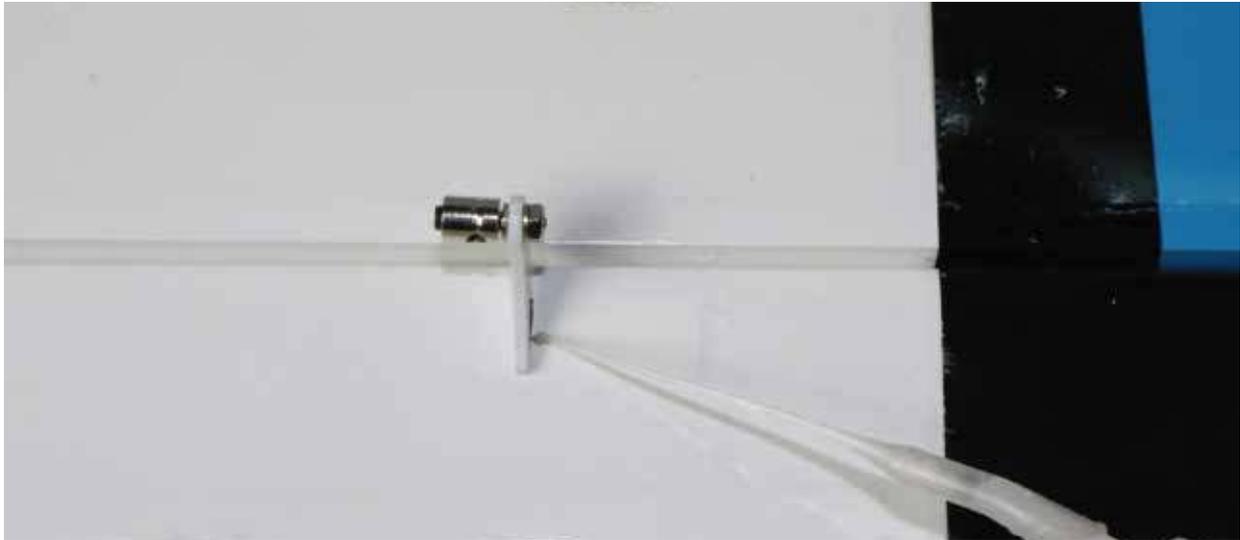
1. Please read this manual carefully and follow the instructions of the manual before you use this products.
2. Our airplane is not a toy, which is only suitable for experienced pilot. Or if you are a novice pilot, please operate under the guidance of an experienced pilot.
3. Not recommended for children under 14 years old.
4. Please adjust this plane according to the instructions and make sure to keep your body parts out of the rotating propeller all the time, or it may cause damage to the plane or serious injuries to your body.
5. Do not fly in the thunderstorm, strong wind or bad weather.
6. Never fly R/C planes where there are power lines overhead, automobiles, airport, railway or near a highway.
7. Never fly R/C planes where are crowds of people. Give yourself plenty of room for flying, as the plane can fly at a very high speed. Remember that you are responsible for others safety.
8. Do not attempt to catch the plane when you are flying it.
9. The operator should bear full responsibility of proper operation and usage with regards to the model. We, Hobbyking will not be responsible for any liability or loss due to improper operation.

1. Install both wheel axles on the landing gear. Tightened it with the supplied nyloc-nut. Then install both wheels on the axles. Use the supplied collar and apply loctite glue to the grub screws and lock the wheels in place. Use the supplied screws to secure the main gear onto the fuselage as shown.



# Crusader 30E

2. Install the aileron strips on the main wing. Apply a few drops of CA glue to secure the strips into place.
3. Install servos onto the wing servo pocket. Hook up the control linkages to the control surfaces. Apply glue to the control horn and stick it on the aileron strip.



4. Install the main wing onto the fuselage. Use the supplied socket head screws to lock it into place



5. Install the elevator to the stabiliser as shown. Note: You may first align the elevator and stabiliser carefully with minimal gaps in between the two. Once you are satisfied with the setup, apply CA glue to the hinge and let dry.



# Crusader 30E

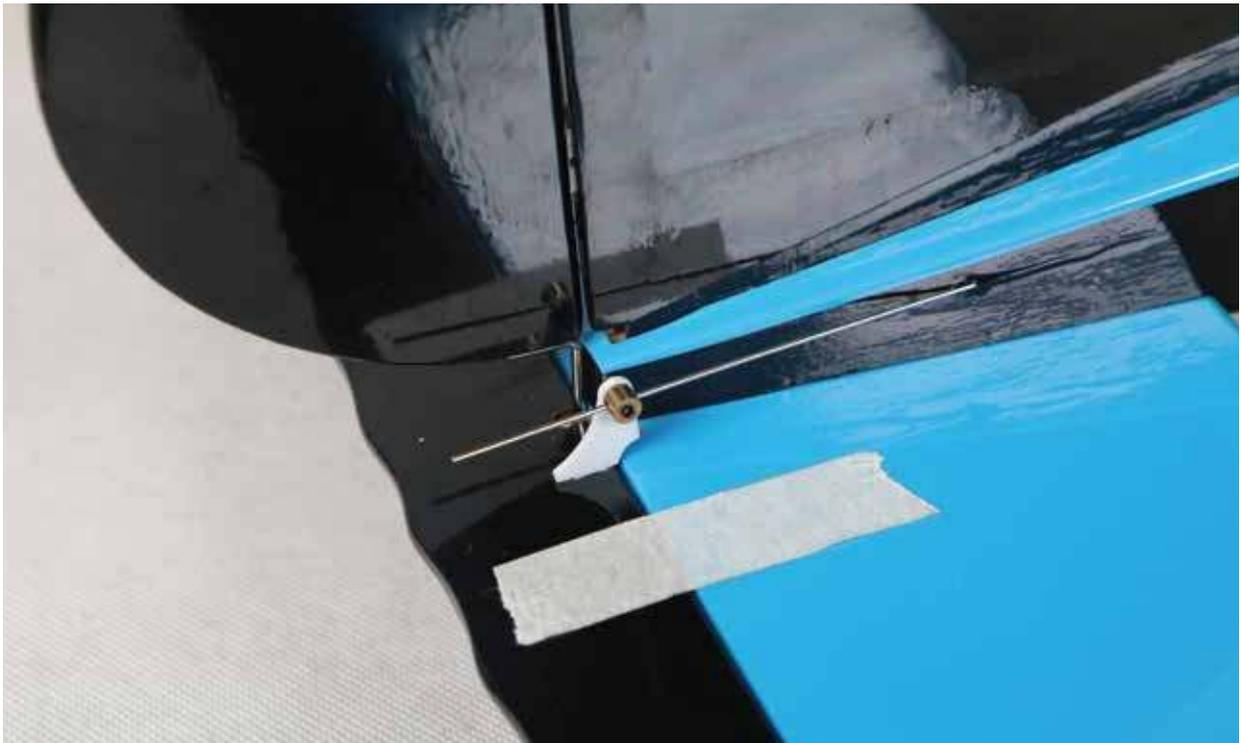
6. Install the tail gear into the mounting plate as shown.  
Then use the supplied screws and install the stabiliser onto the fuselage with the tail gear assembly in place.



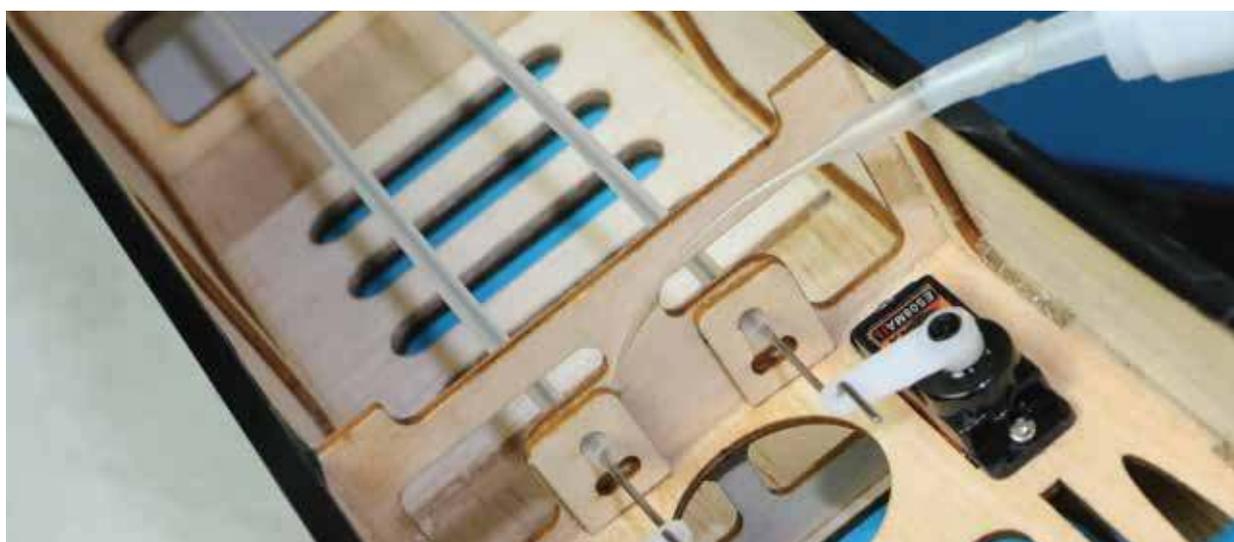
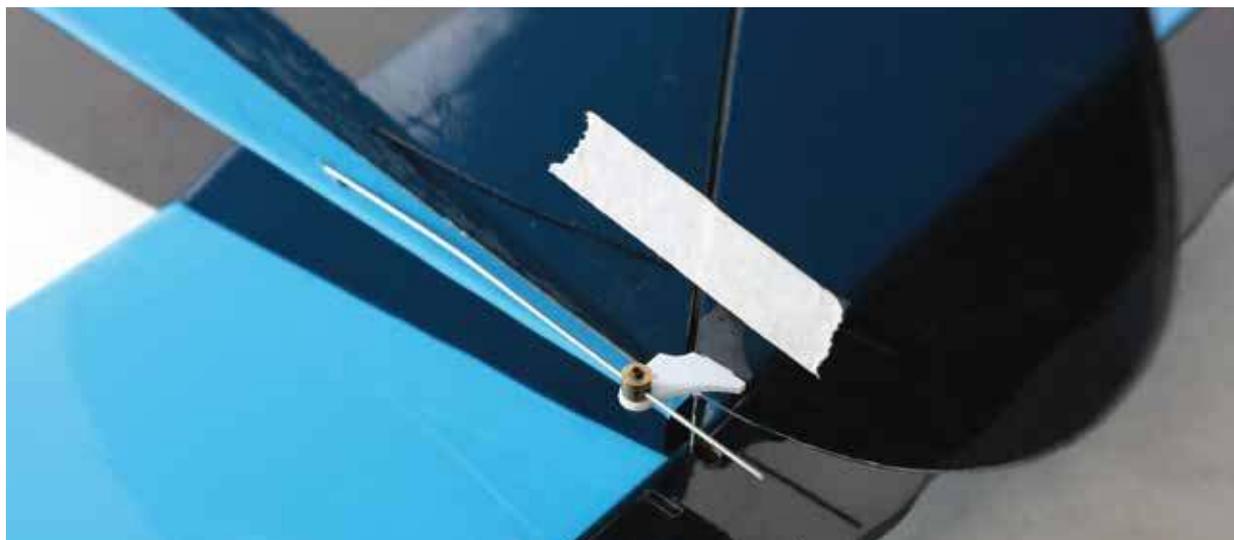
7. Install the vertical fin and simultaneously insert the tail wheel steering control arm into a slot on the rudder as shown. Apply epoxy glue to the tail fin and let it dry. Note: Ensure the empennage is true and square to the wing when install.



8. You may install the rudder and elevator servos at this time. First, use a piece of tape and tape the control surfaces to the fin/ stabiliser to ensure the control surfaces are levelled. Hook up the control linkages to the pushrod adjuster and tighten it with the grub screw. Trim the excess pushrod by a wire cutter.

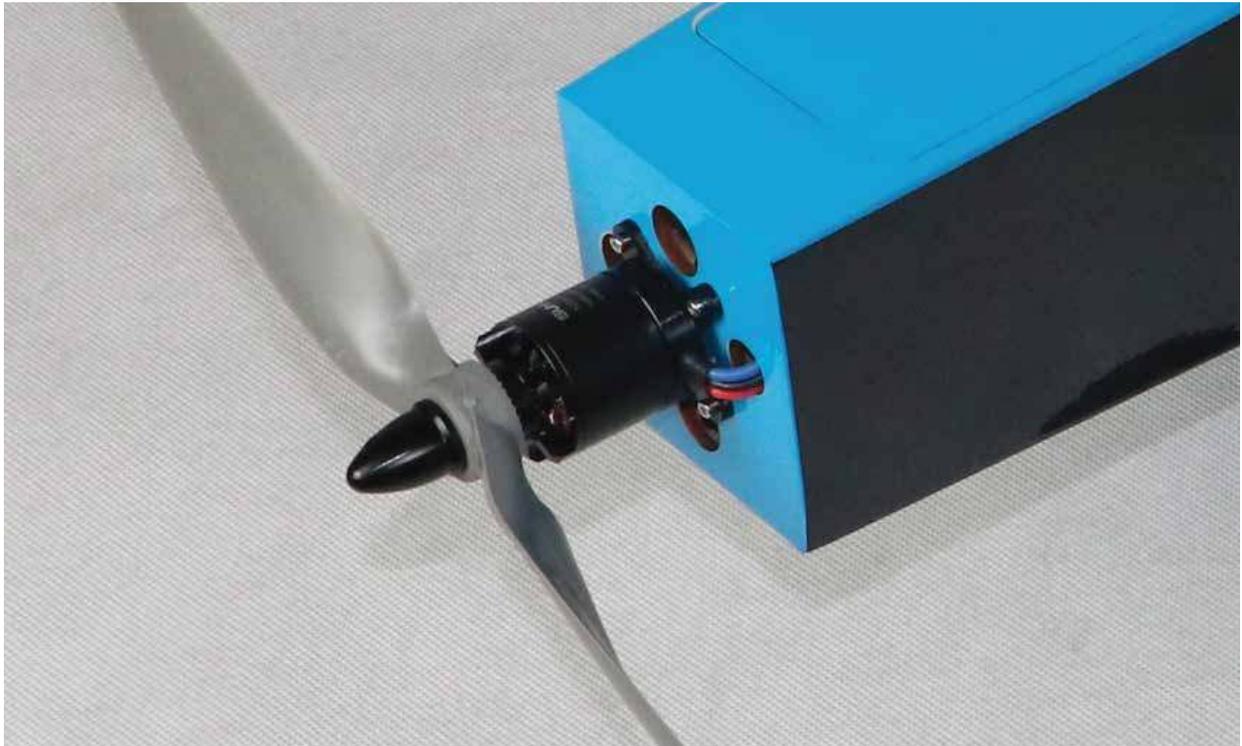


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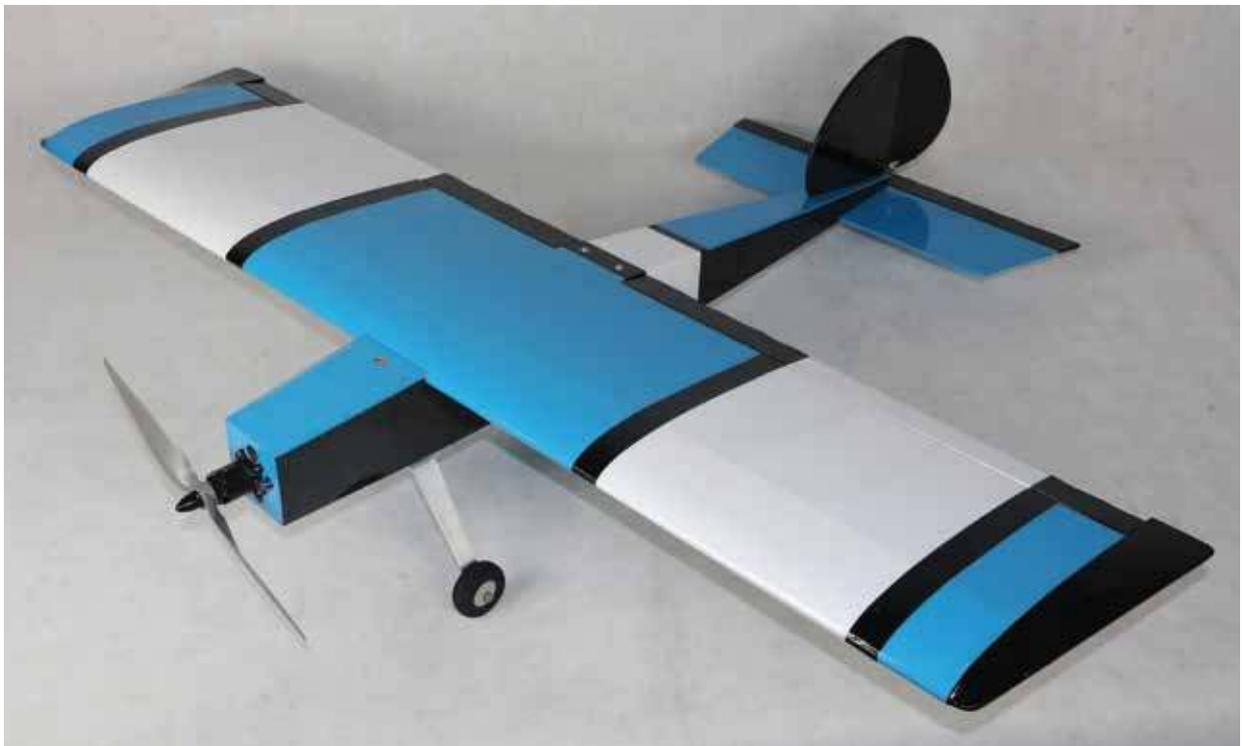


9. Install you desired brushless motor onto the motor mount as shown. The motor thrust line should be 2 degrees to the right and 2 degrees down to counteract the motor torque and pitching up when apply power vigourously.





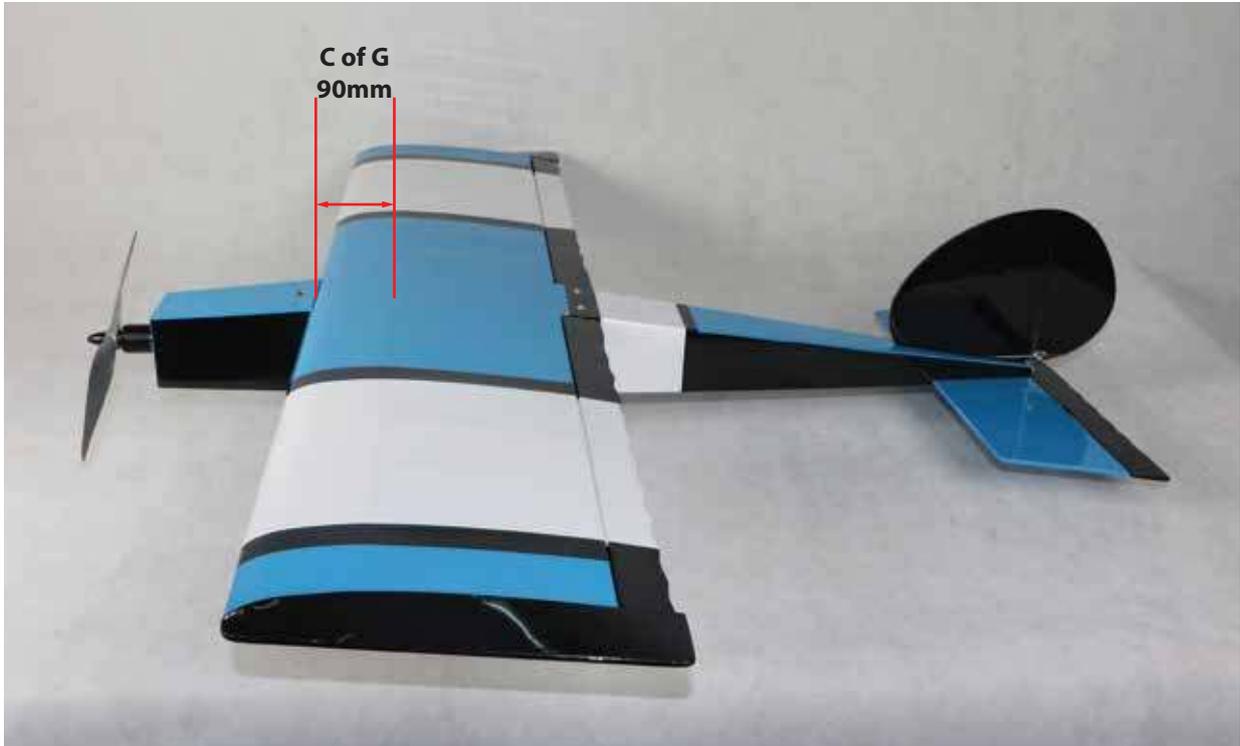
10. Done!



# Crusader 30E

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90mm from the wing's leading edge.



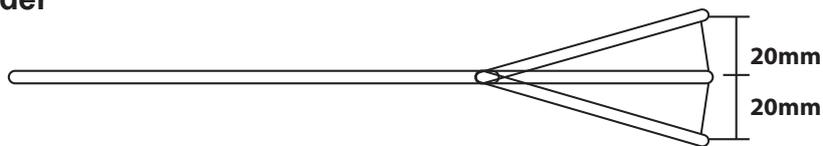
Recommend control throws:

Rudder: 20mm L/R

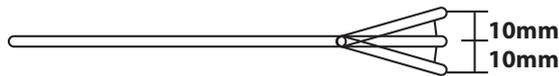
Elevator: 10mm up/down

Aileron: 8mm up/down

**Rudder**



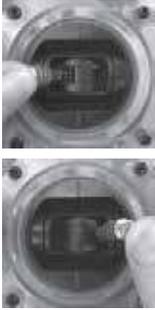
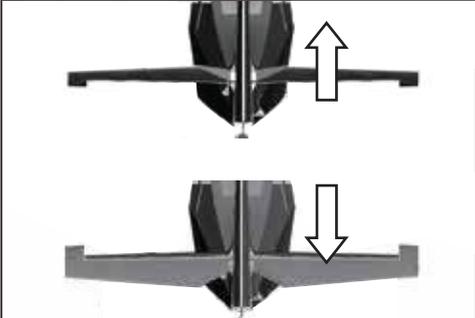
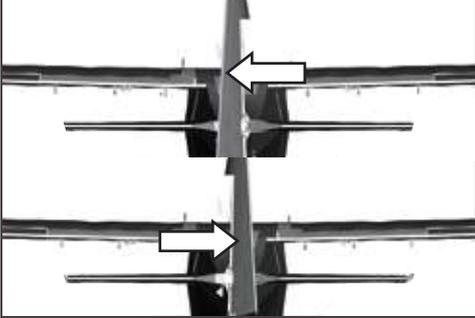
**Elevator**



**Aileron**



## Control Direction Test

	<p>Roll left</p> <p>Roll right</p>		<p>Aileron (Roll)</p>
	<p>Pitch up</p> <p>Pitch down</p>		<p>Elevator (Pitch)</p>
	<p>Yaw left</p> <p>Yaw right</p>		<p>Rudder (Yaw)</p>

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