

MAX-THRUST **RIOT XL**

USER MANUAL

MAX-THRUST

www.max-thrust.com



Specification	
Wingspan	63 in (1600 mm)
Length	50.7 in (1287 mm)
Weight (with battery)	5.24 lb-5.39 lb(2380g-2450g)
Propeller:	SF1470 prop

Max-Thrust products are distributed by:
Century UK LTD, 7 Anchor Business Park, Castle Road, Sittingbourne,
KENT. ME10 3AE

Important

This aircraft is not a toy and is only suitable for, or under the guidance of an experienced pilot.

Not recommended for anyone under 14 years old unless supervised.

Please read this manual carefully and follow the instructions fully before you use this aircraft.

Examine your kit carefully!

Our model aircraft kits are subject to constant quality checks throughout the production process and we sincerely hope that you are completely satisfied with the contents of your kit. However, we would ask you to check all the parts before you start construction, referring to the parts list, as we cannot exchange components which you have already assembled or modified. If you find any part is not acceptable for any reason we will readily correct or exchange the part once we have examined the faulty component. Please contact your place of purchase first and follow the correct returns process.

We are constantly working on improving our models and for this reason we must reserve the right to change the kits contents in terms of shape or dimension of parts, technology, materials and fittings without prior notification. Please understand that we cannot entertain claims against us if the kit contents do not agree in every respect with the instructions and the illustrations.

Caution

This aircraft is a sophisticated hobby product and is NOT a toy. It must always be operated with caution and common sense and some basic mechanical ability. This manual provides instructions as to the assembly and maintenance of the Riot XL, if you are unsure of any stage please seek out experienced advice, contact your place of purchase or ourselves.

It is highly recommended that you follow and read the instructions and warnings stated in this manual.

If you have never flown an RC aircraft we would suggest you talk to your local model flying club or an experienced RC pilot before attempting to fly this aircraft. You are responsible for the safe operation and the safety of others whilst using this aircraft. For further advice or to find your local model flying club visit www.bmfa.org

The Riot XL is very stable thanks to its large 1600mm Wingspan

The airframe has been specially designed to provide maximum strength and rigidity without compromising the flight characteristics of the model.

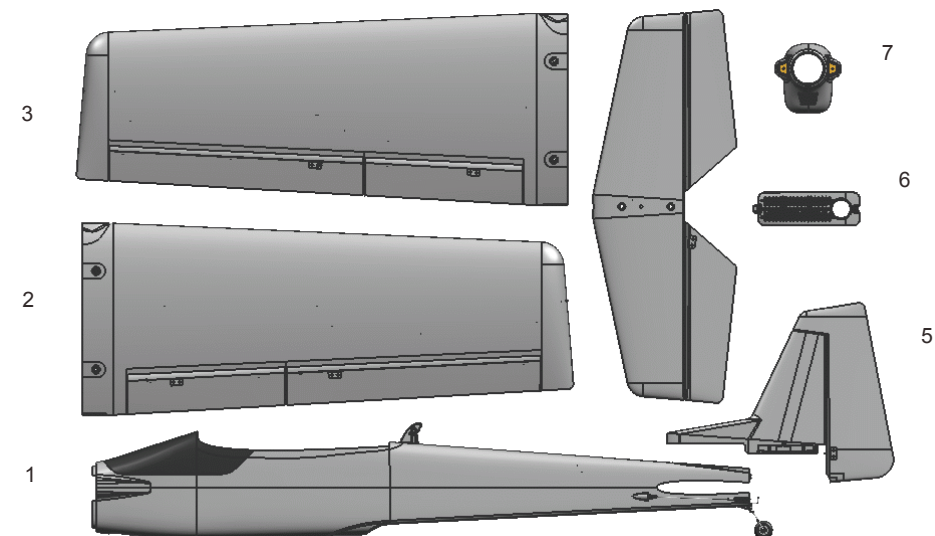
Aircraft grade aluminium single piece undercarriage provides a solid landing platform.

Glider tow and release system fitted as standard

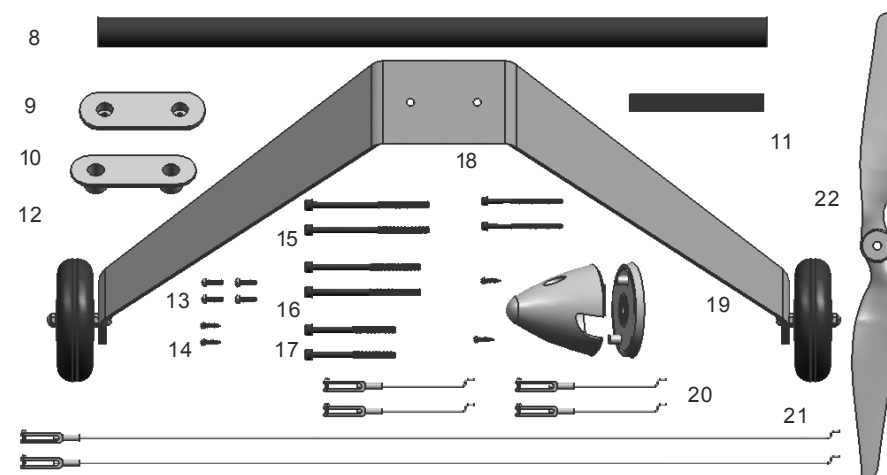
Quick and easy battery changes.

High performance brushless motor and ESC

Wing tip LED navigation lights.



1.	Fuselage	x 1	5.	Rudder and Fin	x 1
2.	Right Wing	x 1	6.	Battery Cover	x 1
3.	Left Wing	x 1	7.	Cowling	x 1
4.	Horizontal Tail	x 1	8.	Main Spar	x 1

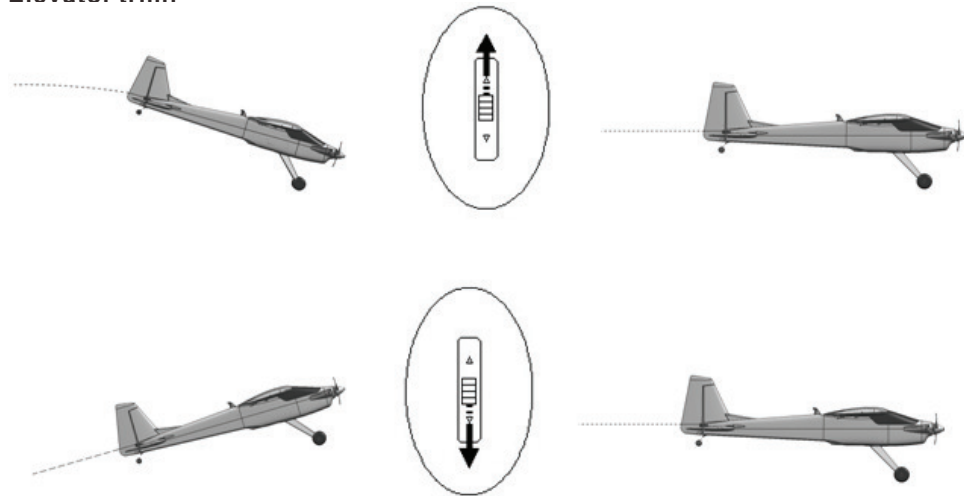


9.	Rear Wing Connector	x 1	16.	Screw (M4 x 65mm)	x 2
10.	Front Wing Connector	x 1	17.	Screw (M4 x 50mm)	x 2
11.	Wing Location Rod	x 1	18.	Screw (M3 x 45mm)	x 2
12.	Landing Gear	x 1	19.	Spinner	x 1
13.	Screw (M3 x 10mm)	x 4	20.	Push rod 1	x 4
14.	Screw (M2 x 14mm)	x 2	21.	Push rod 2	x 2
15.	Screw (M4 x 70mm)	x 2	22.	Propeller 14x7	x 1

- Flying faster or slower: When your aircraft is stable in the air, push the throttle stick up to make the aircraft go faster, and pull the throttle stick back to slow down. The aircraft will climb when the throttle is increased.
- Elevator up and down: Push the elevator stick forward to make the aircraft go down and pull the elevator stick back to go up.
- Steering right and left: Move the rudder or aileron stick right to make the aircraft go right and move the rudder or aileron stick left to go left (as if you are seated in the cockpit).

Flight Trimming

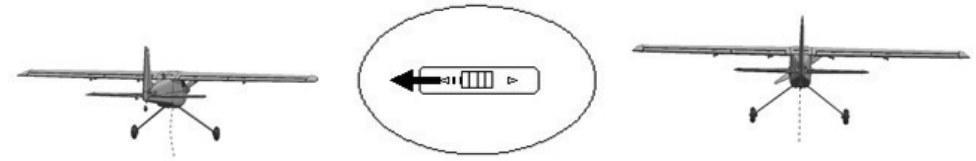
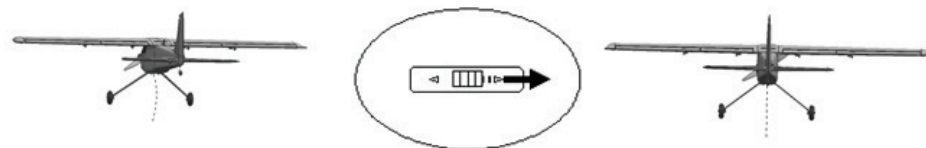
Elevator trim:



Only trim the aircraft at half throttle. When trimmed correctly, your aircraft climbs steadily at full throttle and will fly level at half throttle.

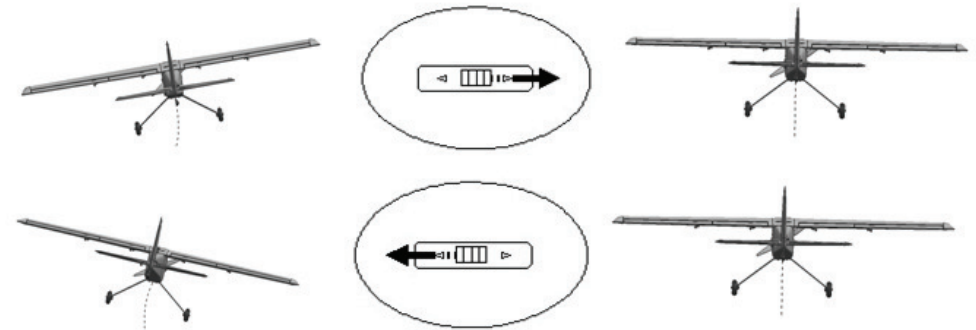
- When the aircraft's nose drifts up or down while the elevator stick is at neutral (centered) position, push the elevator trim button by one or two "beep" increments OPPOSITE the direction of drift.
- Adjust trim so the aircraft flies straight and level when the elevator stick is neutral.

Rudder trim:



- When the aircraft drifts left or right while the rudder stick is at the neutral position (centered), push the rudder trim button by one "beep" increments OPPOSITE the direction of drift.
- Adjust trim so the aircraft flies straight when the control stick is neutral.

Aileron Trim



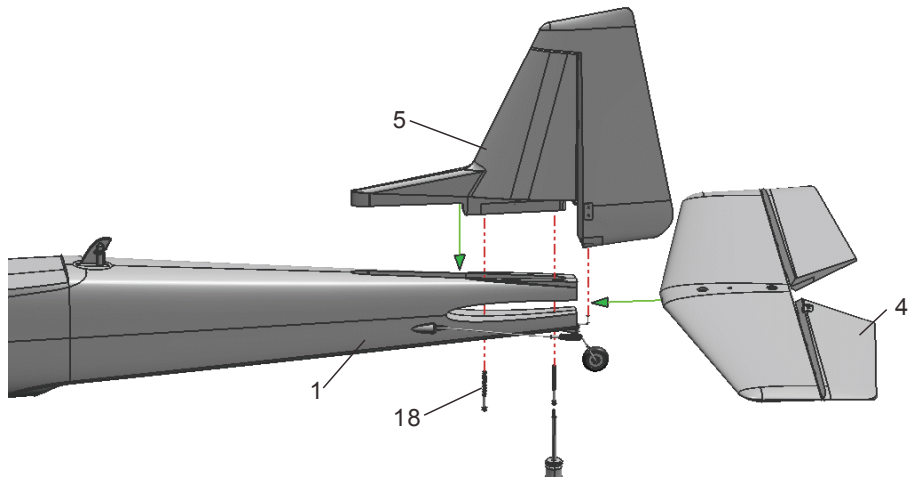
- When the aircraft rolls left or right while the aileron stick is at the neutral position (centered), push the aileron trim button by one "beep" increments OPPOSITE the direction of drift.

ASSEMBLY

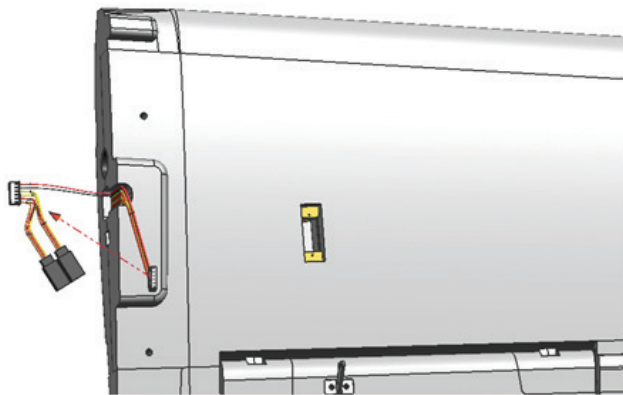
If you have purchased this model as a Plug and Play aircraft you may find that some of the following steps have already been completed for you. It is a good idea to check all screws are tight and everything has been assembled correctly though.



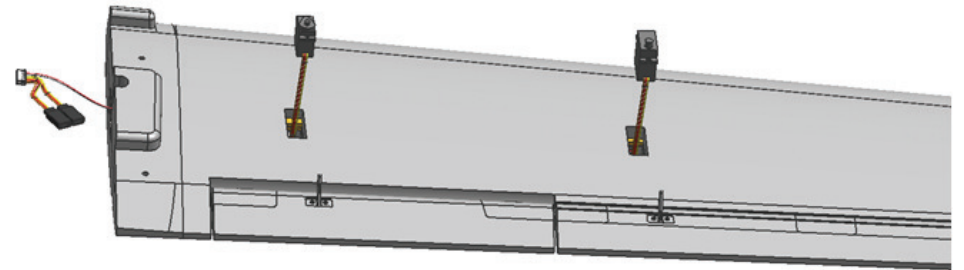
1. Install the landing gear on corresponding slot of fuselage, and fix with two pcs screws.



2. Insert elevator and rudder on the corresponding slot of fuselage, meanwhile ensure to insert the tail wheel steel wire to the corresponding slot of rudder, and fix with two pcs screw.



3. Take out 2 wires from wing (the female plug which connect the aileron and flap)



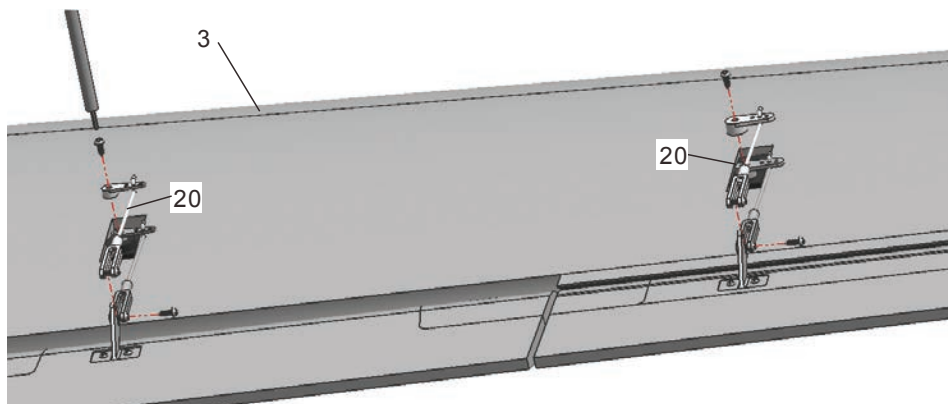
4. Insert the cable from aileron servo and flap servo into the corresponding slot of left wing, and put the servo on the slot.



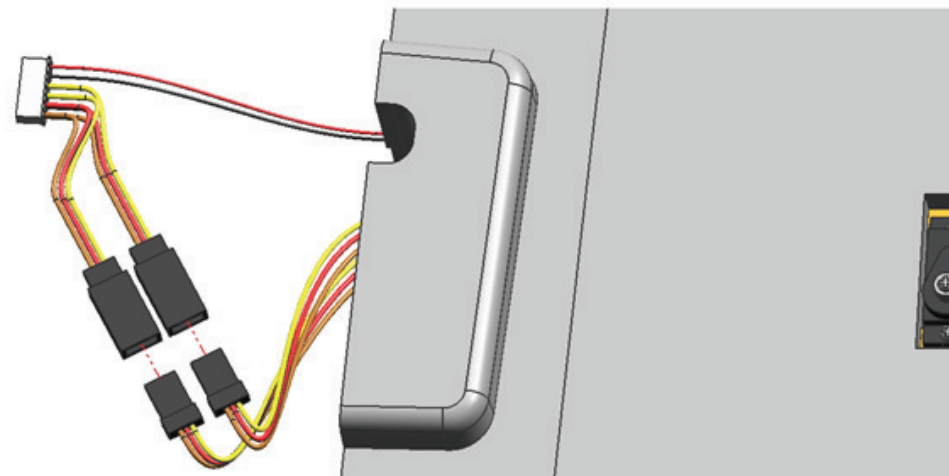
5. Fix the aileron servo and flap servo on left wing with screw.



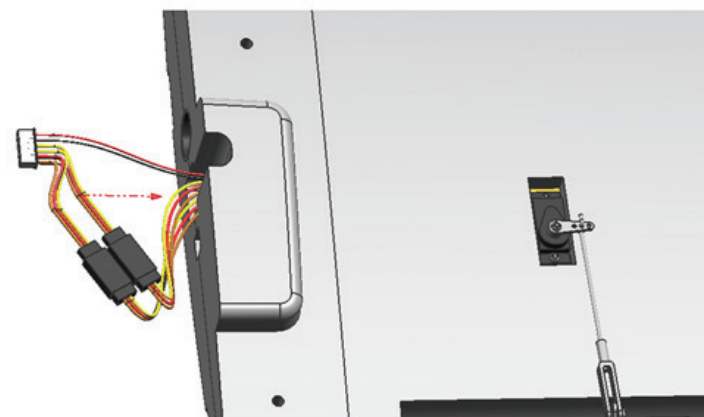
6. Attach Push rod 1 to the servo arm.



7. Fix the pushrod 1 servo arm on the servo, put one head plastic clip of pushrod 1 and fix on servo with screw.

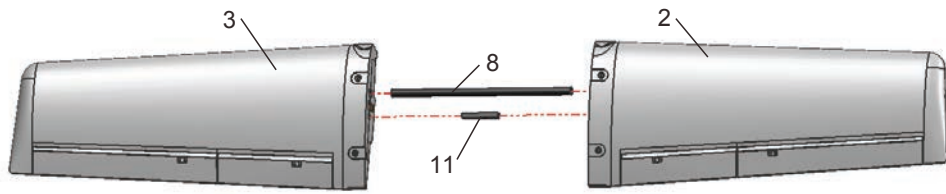


8. Connect the aileron servo lead and flap servo lead (male plug) to corresponding female plug.

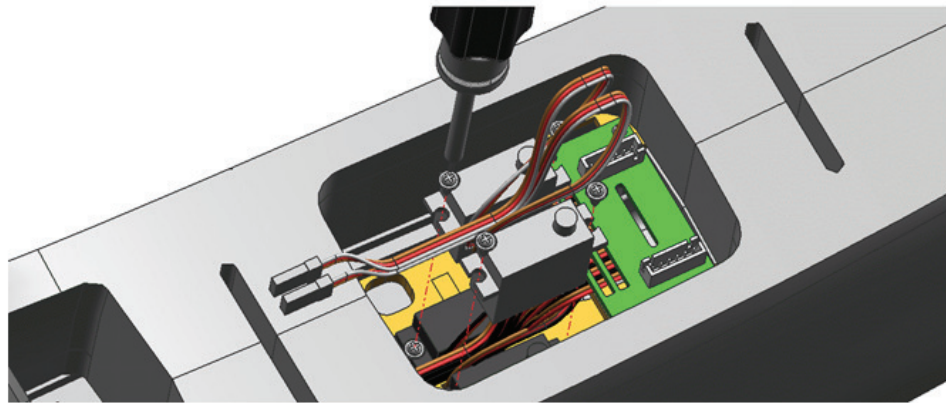


9. Insert the connected wires into the corresponding slot.

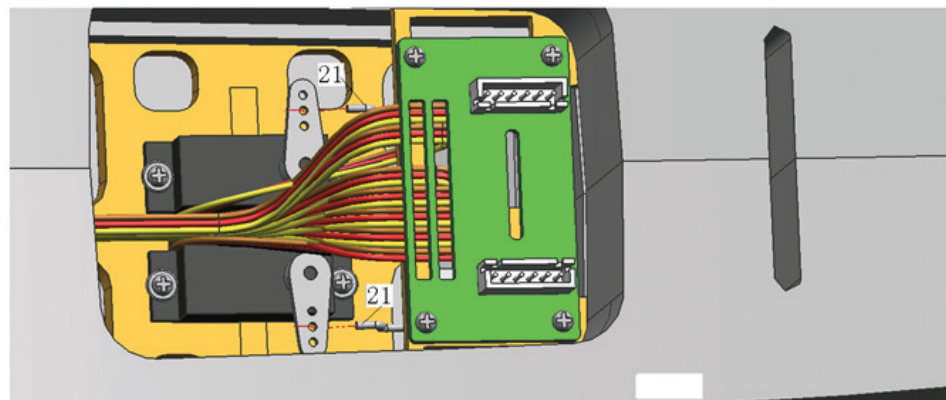
10. Repeat the left wing installation steps from 3 to 9 for the right hand wing panel



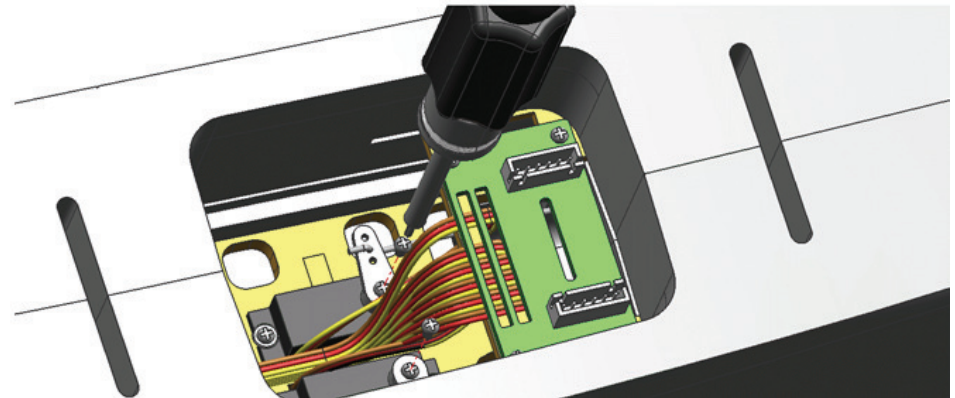
11. Insert the main spar and the locating rod in to one half of the wing and then slide the other side on being careful to make sure everything is aligned and no cables are snagged.



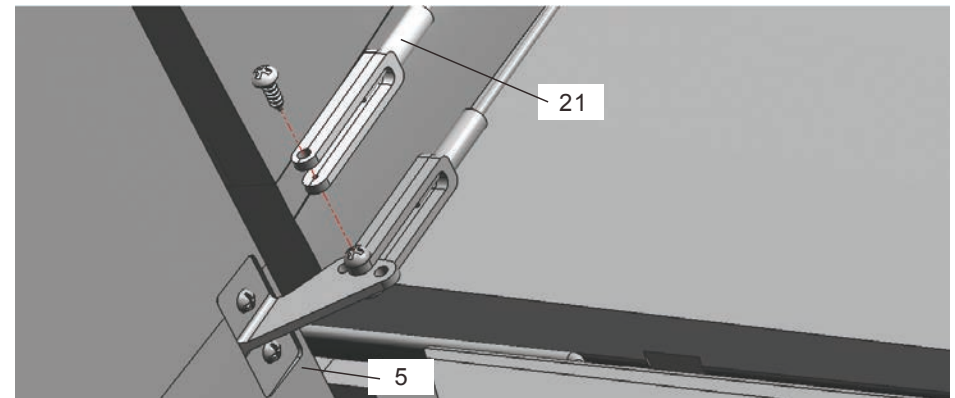
12. Install elevator servo and rudder servo in the corresponding slot of fuselage with screw.



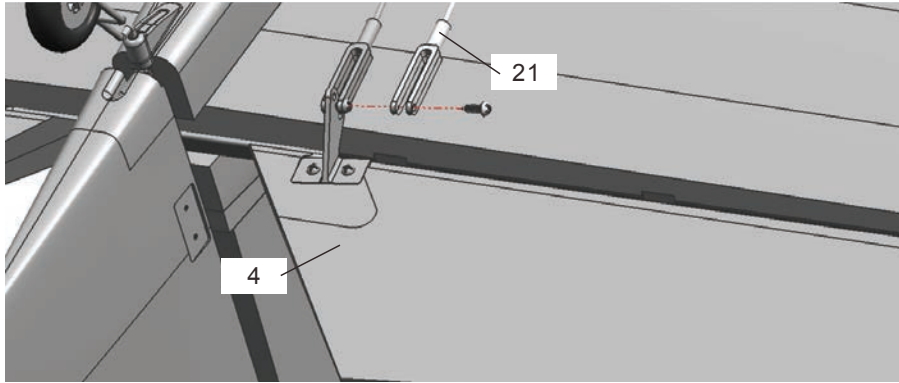
13. Install and connect pushrod 2 to the servo horns and fit to the servos



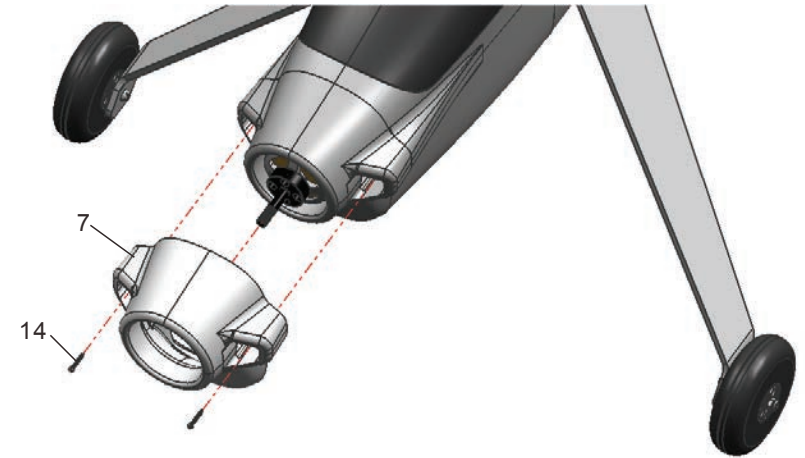
14. Fix the servo arm with pushrod 2 on servo with screw.



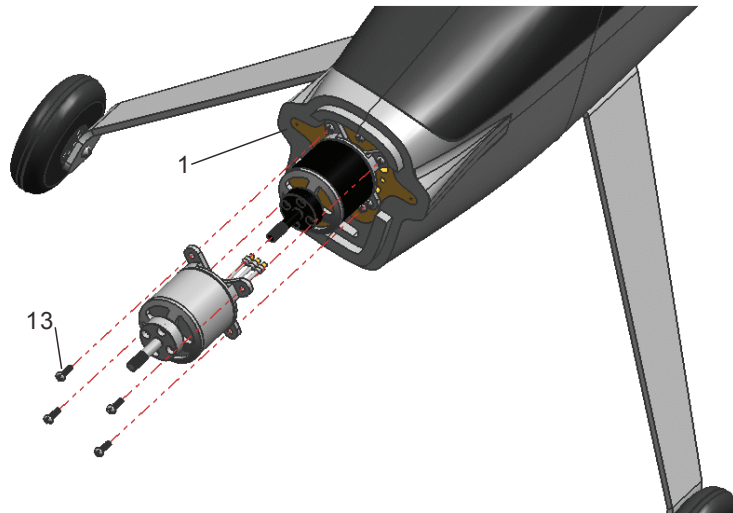
15. Installed one clip head of pushrod2 on rudder servo arm, fix on rudder with screw.



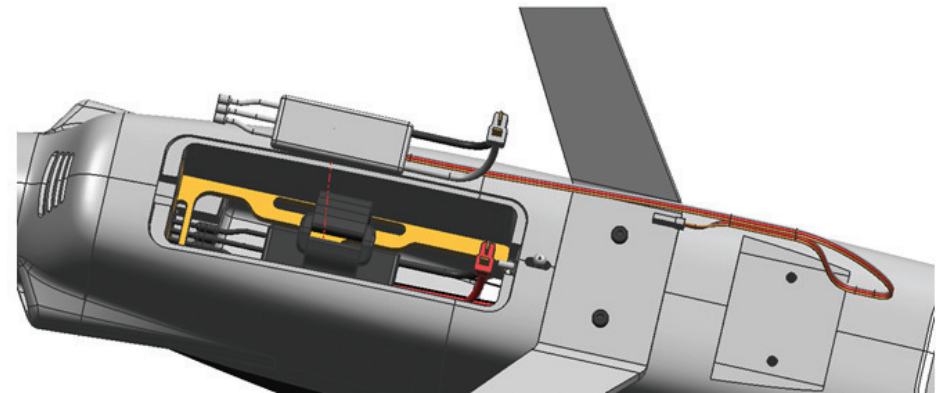
16. Installed one clip head of pushrod2 on rudder servo arm, fix on rudder with screw.



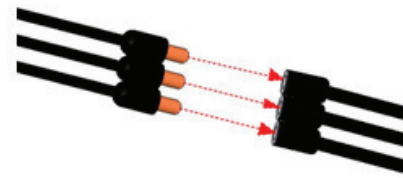
18. Install the front nose cowling and fix with 2 screws through the air inlets



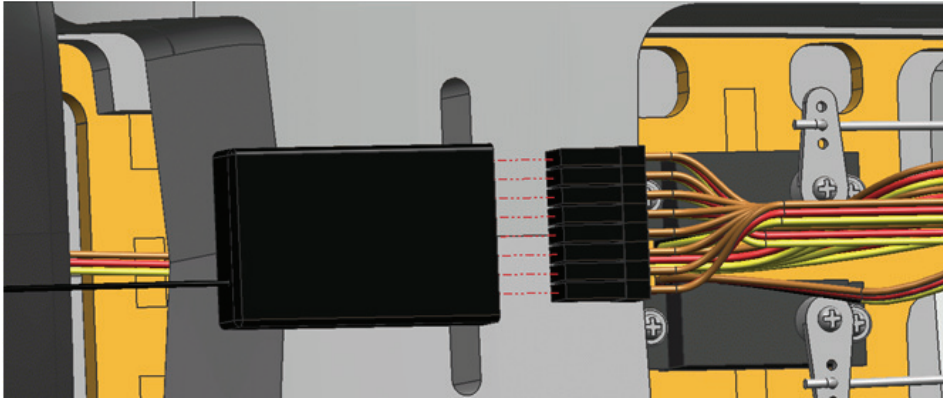
17. Fix the motor on the motor mount with screw.



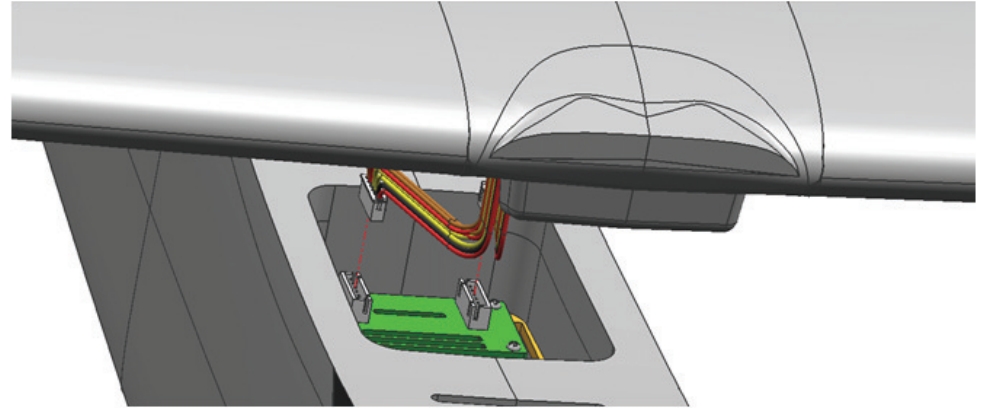
19. Put the ESC on the battery reinforcement plate, fix with velcro strap.



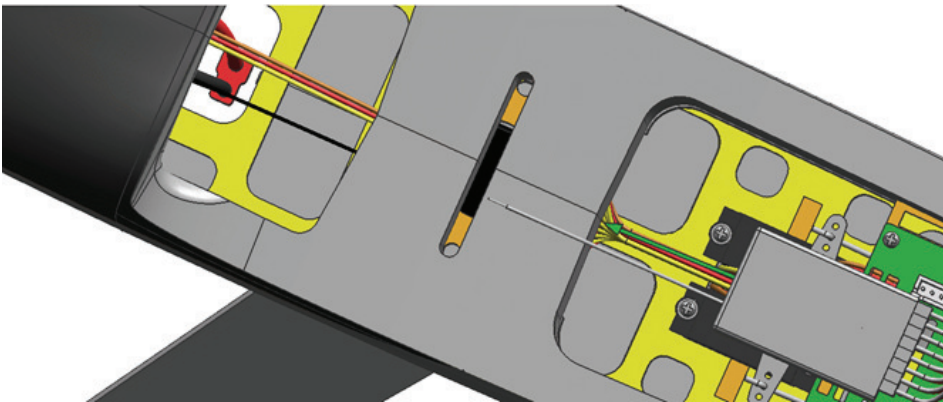
20. Connect the motor wires to the ESC. If motor runs backwards reverse this connection.



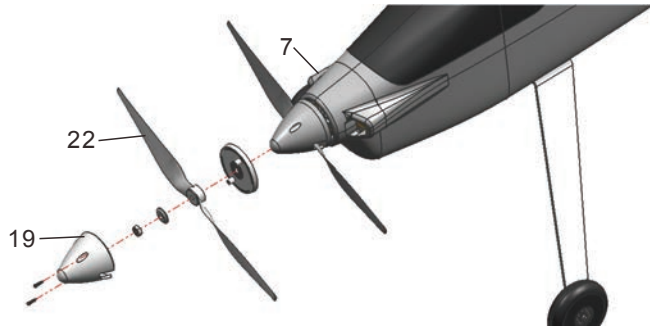
21. Insert all servo wires and esc signal lines to corresponding channel of radio in turn.



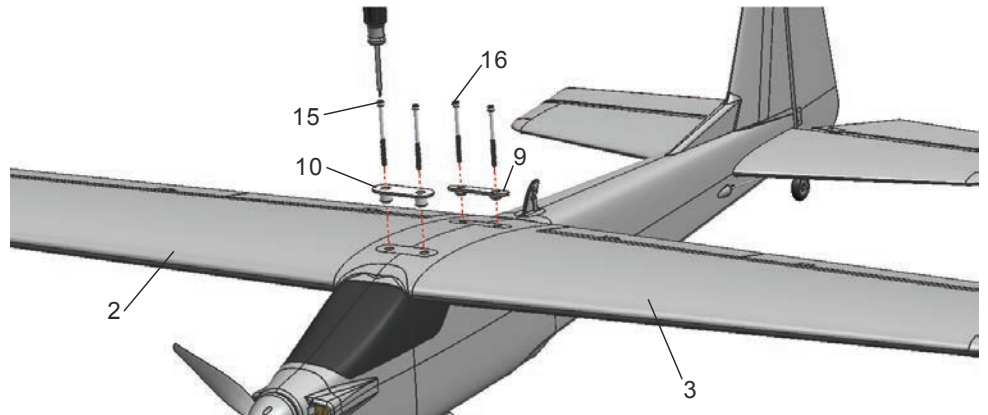
24. Insert the connected plug on the right and left wing to socket on PCB of fuselage.



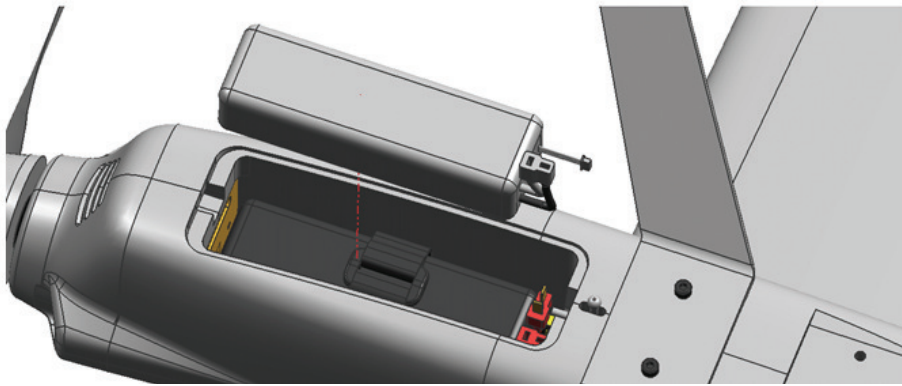
22. Insert the receiver into the fuselage and fix securely.



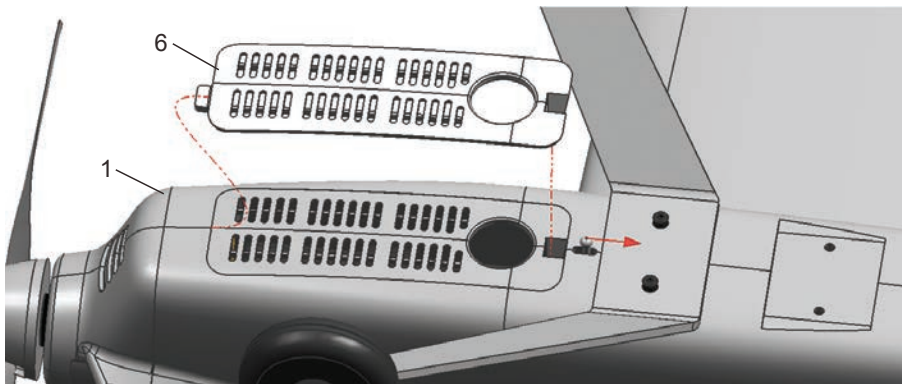
23. Fix the propeller on the motor with screw, and then fix the spinner with screw.



25. Fix the wing on fuselage with screws.

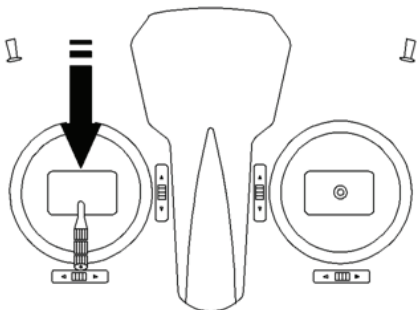


26. Put the battery on battery plate and fix with velcro strap.

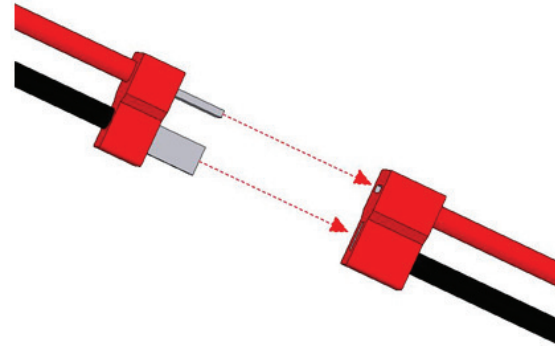


27. Clip in the battery compartment door.

Connect the Flight Battery



1. Lower the throttle stick and throttle trim to their lowest settings and power on your transmitter.



2. Connect the flight battery to the aircraft

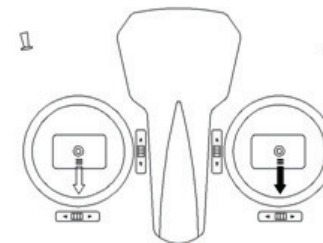
2. Immobile for 5 seconds. Series of tones.

CAUTION: Always keep hands away from the propeller. When armed, the motor will turn the propeller in response to any throttle movement.
CAUTION: Always disconnect the Li-Po flight battery from the aircraft receiver when not flying to avoid over discharging the battery.

Control Surface Test

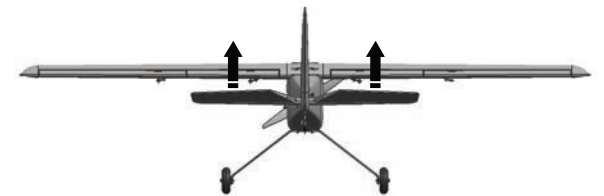
1. Power on the transmitter.
2. Install a fully charged flight battery and allow the aircraft's ESC to initialize.

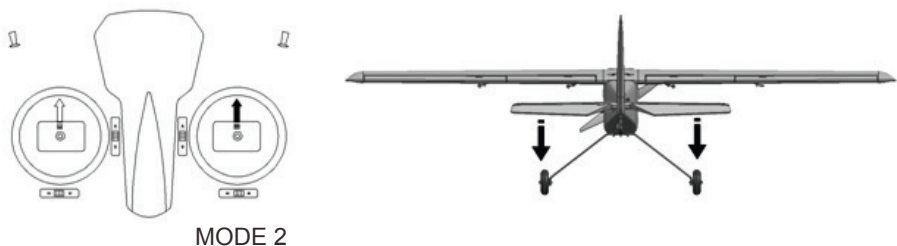
Test the Elevator



MODE 1

MODE 2

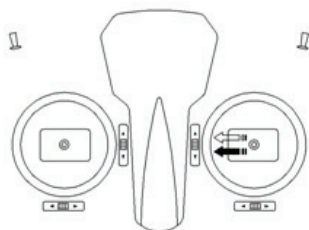




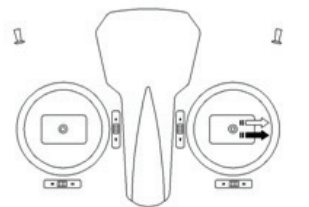
MODE 2

• Test your Elevator control by moving your elevator stick down and up. Make sure that the elevator responds according to the illustrations.

Test the Aileron



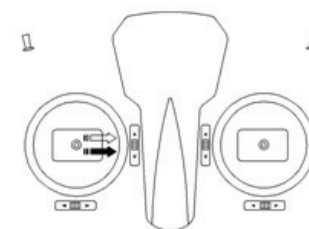
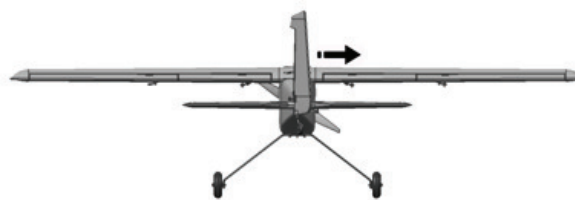
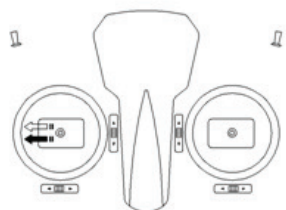
MODE 2



MODE 2

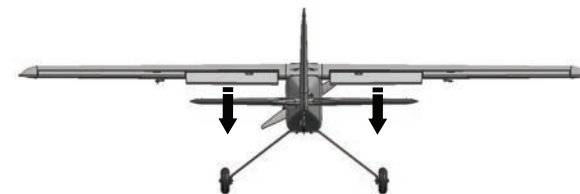
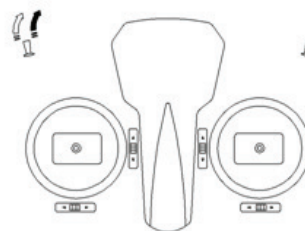
• Test your Aileron control by moving your aileron stick down and up. Make sure that the aileron responds according to the illustrations.

Test the Rudder



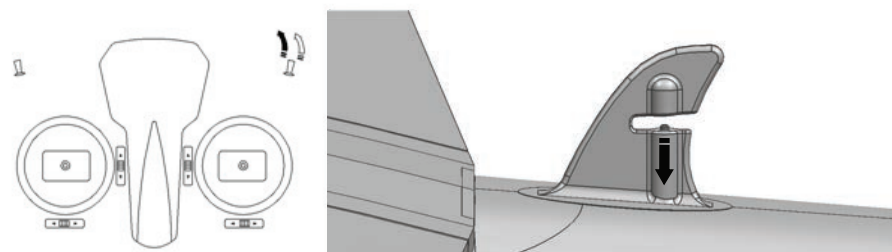
• Test your rudder control by moving your rudder stick left and right. Make sure that the rudder responds according to the illustrations.

Test the flap



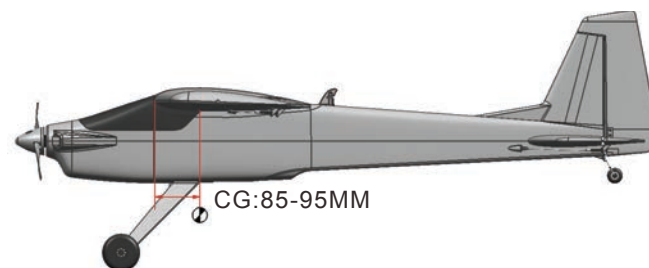
Make sure that the rudder responds according to the illustrations.

Test the Tow Release



Make sure that the tow release responds according to the illustrations.

Centre of Gravity



The centre of gravity (CG) should be at a position of 85mm-95mm away from leading edge, Please refer to above picture.

Safety

Safety is the First Commandment when flying any model aircraft. Third party insurance should be considered a basic essential. If you join a model club suitable cover will usually be available through the organisation. It is your personal responsibility to ensure that your insurance is adequate. Make it your job to keep your models and your radio control system in perfect order at all times. Check the correct charging procedure for the batteries you are using. Make use of all sensible safety systems and precautions which are advised for your system.

Always fly in such a way that you do not endanger yourself or others. Bear in mind that even the best RC system in the world is subject to outside interference. No matter how many years of accident-free flying you have under your belt, you have no idea what will happen in the next minute.

The Max-Thrust team - hope you have many hours of pleasure building and flying your new model.

Wing

