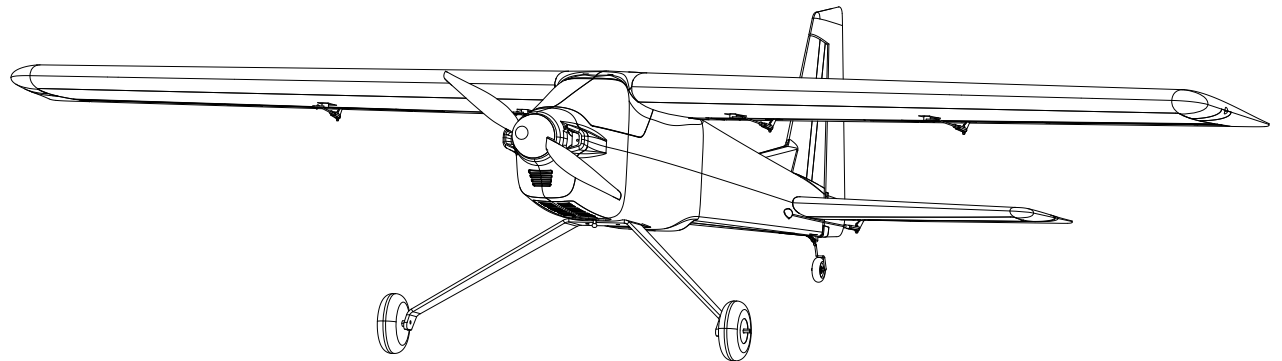


AIR TITAN V2

USER MANUAL



www.motionrc.com
www.motionrc.eu



Warning: This aircraft is a hobby grade product,
only for people 14-year old or above.

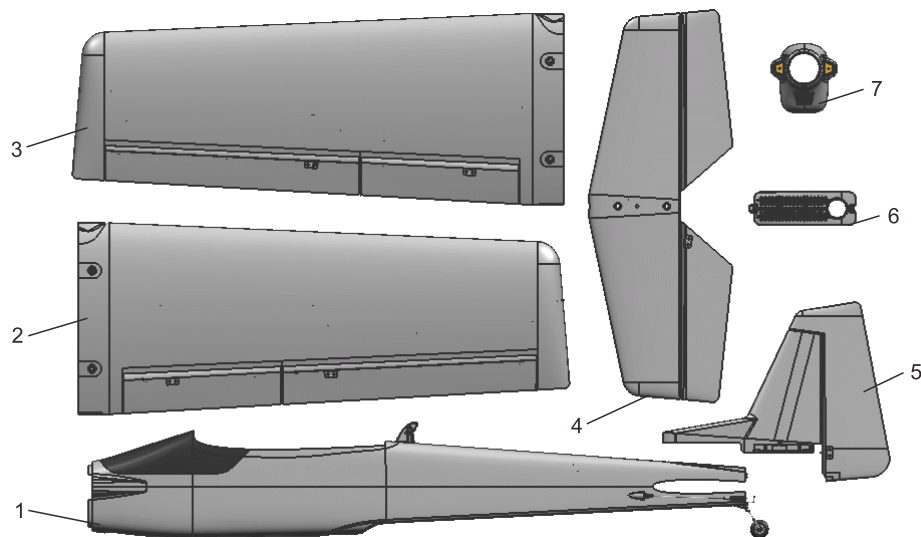
Before operating this unit, please read these instructions completely.

Examine your kit carefully!

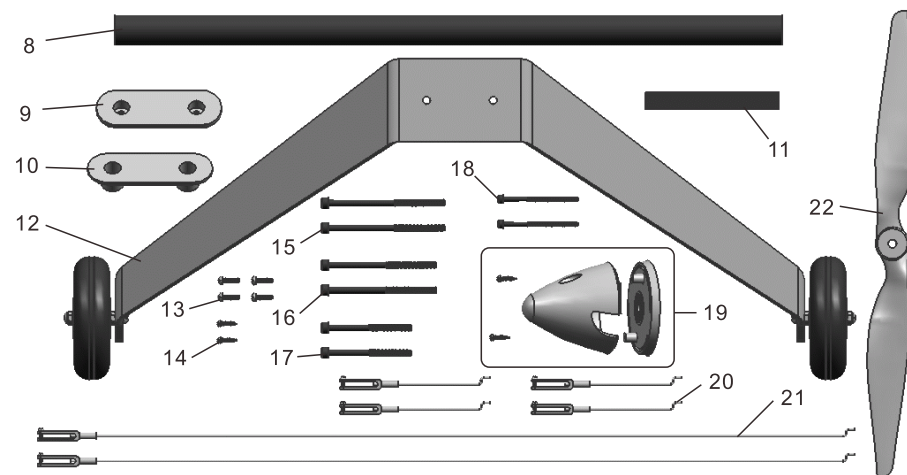
Our model kits are subject to constant quality checks throughout the production process, and we sincerely hope that you are completely satisfied with the contents of your kit. However, we would ask you to check all the parts before you start construction, referring to the Parts List, as we cannot exchange components which you have already modified. If you find any part is not acceptable for any reason, we will readily correct or exchange it once we have examined the faulty component. Just send the offending part to our Model Department. Please be sure to include the enclosed complaint form, duly completed. We are constantly working on improving our models, and for this reason we must reserve the right to change the kit contents in terms of shape or dimensions 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 is a sophisticated hobby product and is NOT a toy. It must always be operated with caution, common sense and some basic mechanical ability. This manual provides instructions as the assembly, safe operation and maintenance of this hobby product. It is highly recommended that you follow and read fully the instructions and warnings stated in this manual including, safety, assembly, set-up and flying guidelines in order to operate this product correctly and avoid damage or serious injury.



- | | |
|--------------------|-----|
| 1. Fuselage | 1pc |
| 2. Right wing | 1pc |
| 3. Left wing | 1pc |
| 4. Elevator | 1pc |
| 5. Rudder | 1pc |
| 6. Equipment cabin | 1pc |
| 7. Nose covering | 1pc |



- | | |
|--|------|
| 8. Wing connected batten1 | 1pc |
| 9. Plastic cover of wing trailing edge | 1pc |
| 10. Plastic cover of wing leading edge | 1pc |
| 11. Wing connected batten2 | 1pc |
| 12. Landing gear | 1pc |
| 13. Screw (M3*10mm) | 4pcs |
| 14. Screw (M2*14mm) | 2pcs |
| 15. Screw (M4*70mm) | 2pcs |
| 16. Screw (M4*65mm) | 2pcs |
| 17. Screw (M4*50mm) | 2pcs |
| 18. Screw (M3*45mm) | 2pcs |
| 19. Spinner | 1pc |
| 20. Pushrod1 | 4pcs |
| 21. Pushrod2 | 2pcs |
| 22. Propeller14*7 | 1pc |

The RTF include



Features

AIR TITAN 1600

1600mm big trainer that can take off/landing on ground, water and snowfield. It's also a good plane for night flying. It has LED setting.

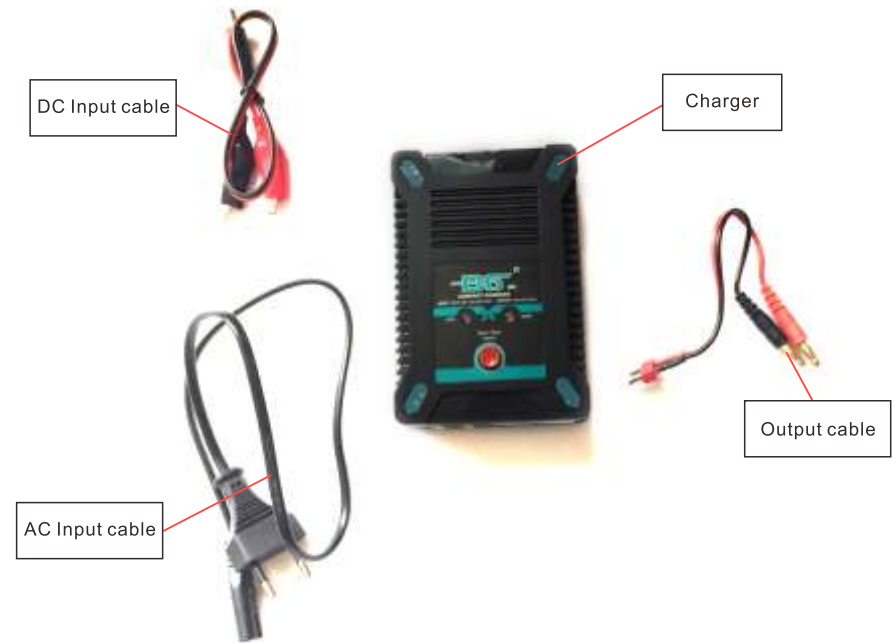
1. A good trainer in very big wingspan 1600MM, with good resistance easy control and carry.
2. Fuselage main reinforcement batten construction, wing fixed construction, landing gear install construction, motor install construction, and tow system construction, they are associated skillfully and ensure the strength of the whole plane.
3. Use the design of tailwheel aircraft, and material of landing gear have been thickened, ensure the stability and durability when take off and landing. Meanwhile the tailwheel linked with rudder, and can control well the flying stance.
4. Can be easily changed to different taking off/landing mode, including ground, snowfield and water.
5. You can install led strips on pre-reserved slots for night flying. It's very easy to operate.
6. Has enough power to tow a glider while flying. A tow construction that controlled by servo is designed.
7. We use simple and reliable bolt way of Battery cabin and set at fuselage Abdomen, it's very easy to change battery.
8. Use T-Motor 3520, ensure the strong power of the plane.
9. Most of the assemble step have been finished at factory, people can enjoy the flying very easily. Solid packaging, simple assemble, easy flying, and high cost performance, it's really good news for many model beginner.

Specifications

AIR TITAN	RTF	PNP	KIT+MOTOR
Motor AS3520 KV 680	Installed	Installed	Installed
ESC 50A With BEC	Installed	Installed	Needed to complete
Servos 17g servo 9g servo	Installed	Installed	Needed to complete
Battery 4S 14.8V 3300mAh 25C Li-Po	Installed	Needed to complete	Needed to complete
Charger B6 2 cells to 6cells Li-Po Charger	Installed	Needed to complete	Needed to complete
Receiver SR-7 7-channel receiver	Installed	Needed to complete	Needed to complete
Transmitter T-6 2.4G	Installed	Needed to complete	Needed to complete

AIR TITAN	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

Charging the Flight Battery





1. Connect temporary B6 charger, there is one LED green light, choose battery type through pressing down the red button, switch two LED light bright. Once choose Lipo, Lipo LED light turns green; Choose NiMh, NiMh LED light turns green.



2. Connect the charger of 4S battery pack, meanwhile connect output port of battery to charger through output cable. Press the red button and loose the button after LED light changed from green to red. The battery is charging.

3. When LED light turn from red to green, 4S battery pack charge complete.

CAUTION: When connecting the battery to the battery charger, make sure the two connectors are correctly oriented. Failure to do so could cause the battery terminals to short, resulting in fire, which could lead to property damage and injury.

Specification

Operating voltage range: AC 110V-240 V, DC 11V-18V.
 Charge power: 50Watts
 Charge current range: 0.5-5.0A
 LiPo battery cont: 2-6 cells
 NiMh battery cont: 1-15 cells
 Size: 130 mm * 90mm * 40mm
 Weight: 355 g

Charging Warnings

- By handling, charging or using the included Li-Po battery, you assume all risks associated with lithium batteries.
- If at any time the battery begins to balloon or swell, discontinue use immediately. If charging or discharging, discontinue and disconnect. Continuing to use, charge or discharge a battery that is ballooning or swelling can result in fire.
- Always store the battery at room temperature in a dry area for best results.
- Always transport or temporarily store the battery in a temperature range of 40–120° F (5–49° C). Do not store battery or aircraft in a car or direct sunlight. If stored in a hot car, the battery can be damaged or even catch fire.
- Always charge batteries away from flammable materials.
- Always inspect the battery before charging and never charge dead or damaged batteries.
- Always disconnect the battery after charging, and let the charger cool between charges.
- Always constantly monitor the temperature of the battery pack while charging.
- Never discharge Li-Po cells to below 3V under load.
- Never leave charging batteries unattended.
- Never charge batteries outside recommended levels.
- Never attempt to dismantle or alter the charger.
- Never allow minors under the age of 14 to charge battery packs..
- Never charge batteries in extremely hot or cold places (recommended between 40–120° F or 5–49° C) or place in direct sunlight.

Transmitter

Mode 1



Mode 2



Installing the Transmitter Batteries

Insert included batteries in the transmitter

CAUTION: If using rechargeable batteries, charge only rechargeable batteries. Charging non-rechargeable batteries may cause the batteries to burst, resulting in injury to persons and/or damage to property.

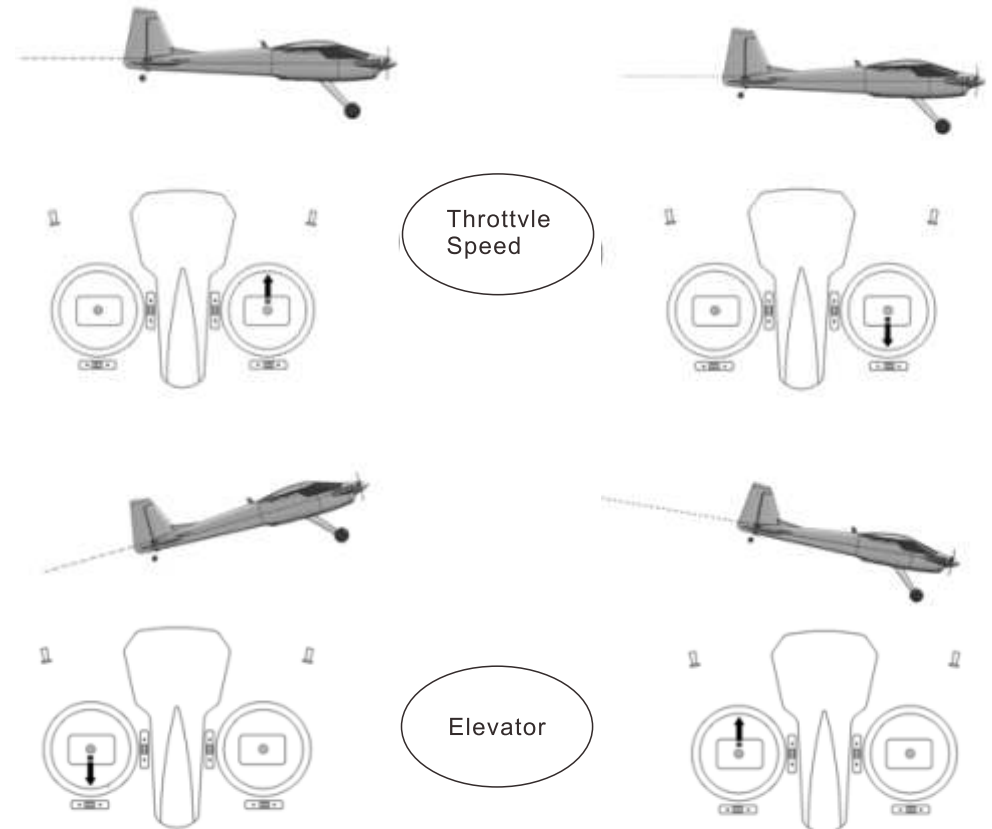
CAUTION: Do not pick up the transmitter by the antenna. Do not alter or put weight on the antenna. Damage to antenna parts can decrease transmitter signal strength, which can result in loss of aircraft control, injury or property damage.

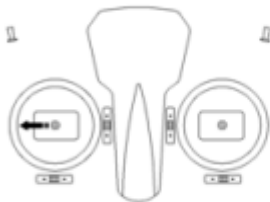
Fly control

For smooth control of your aircraft, always make small control moves. All directions are described as if you were sitting in the aircraft.

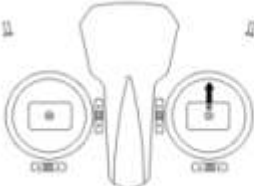
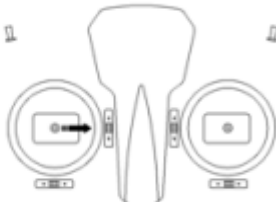
For example, when the aircraft's nose is pointing toward you, left steering (rudder) will turn the aircraft left (your right while holding the transmitter).

Mode 1

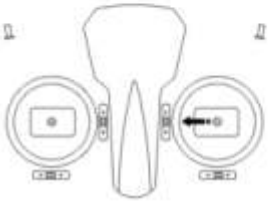
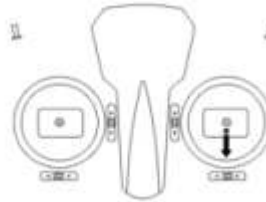




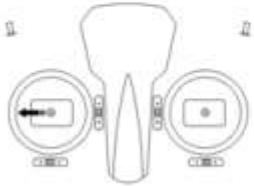
Rudder



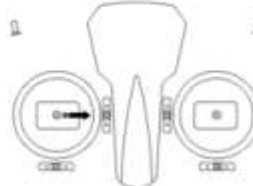
Elevator



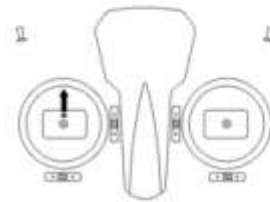
Aileron



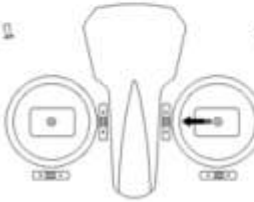
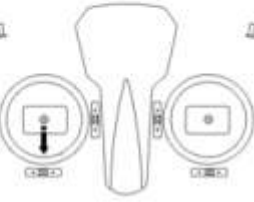
Rudder



Model 2



Throttle Speed



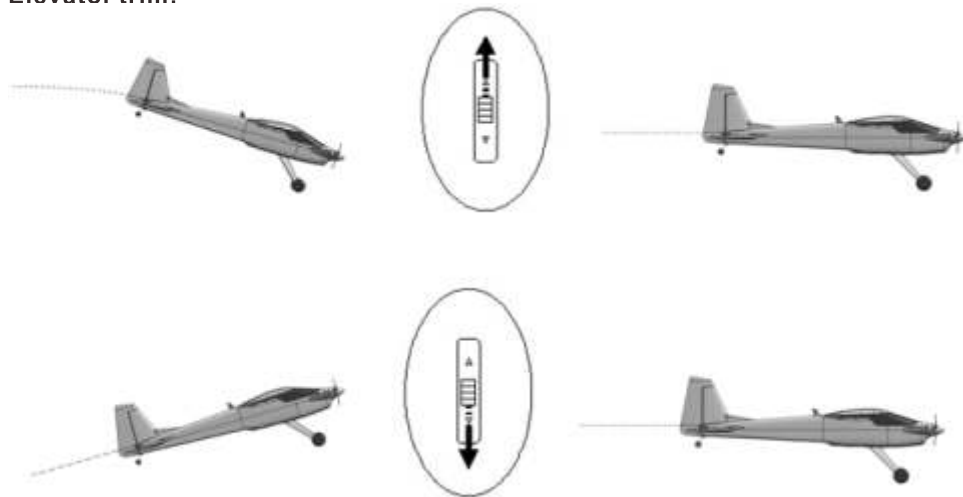
Aileron



- 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 rubber or aileron stick right to make the aircraft go right and move the rubber or aileron stick left to go left (as if you are seated in the cockpit).

Flight Trimming

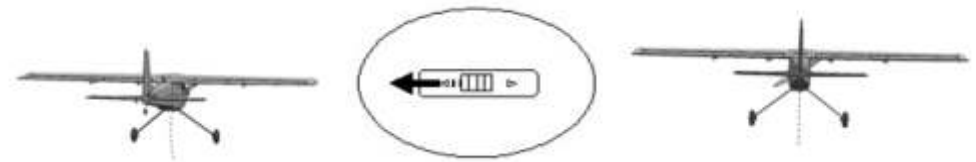
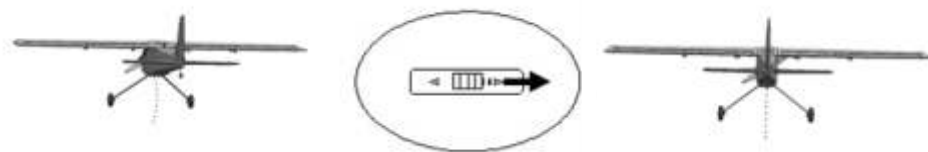
Elevator trim:



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

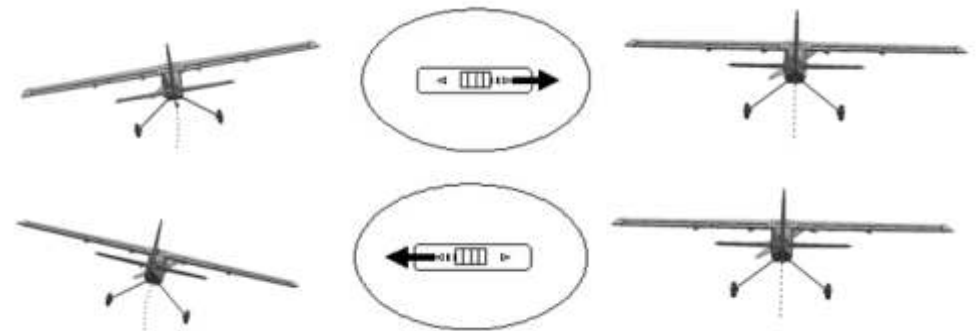
- When the aircraft's nose drifts up or down while the elevator stick is at neutral (centered) position, push the elevator trim button by one or two “beep” increments OPPOSITE the direction of drift.
- Adjust trim so the aircraft flies straight and level when the elevator stick is neutral.

Rudder trim:



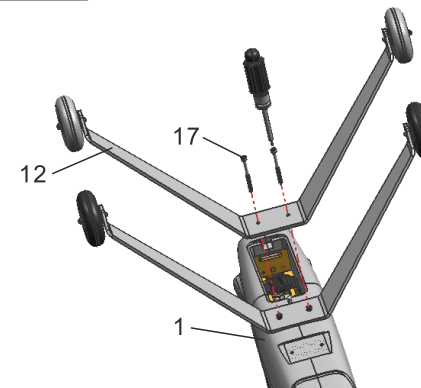
- When the aircraft drifts left or right while the rudder stick is at the neutral position (centered), push the rudder trim button by one “beep” increments OPPOSITE the direction of drift.
- Adjust trim so the aircraft flies straight when the control stick is neutral.

Aileron Trim

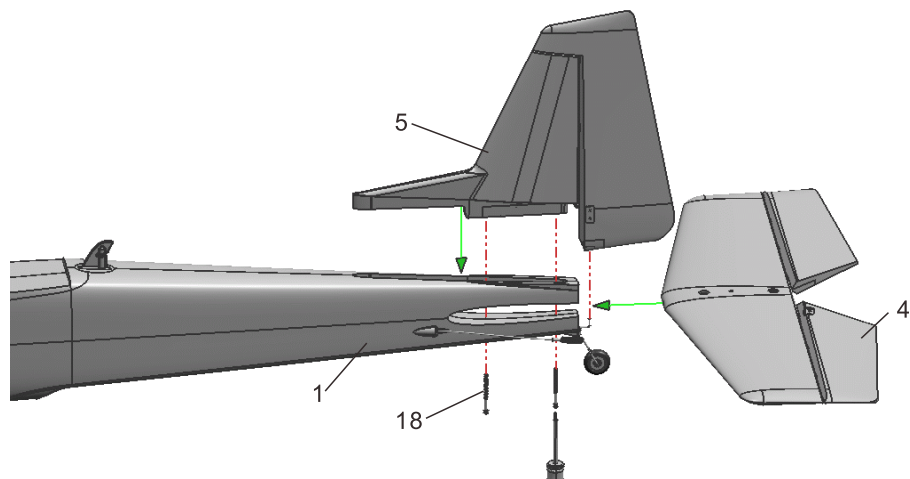


- When the aircraft roll left or right while the aileron stick is at the neutral position (centered), push the aileron trim button by one “beep” increments OPPOSITE the direction of drift.

Steps of ASSEMBLY



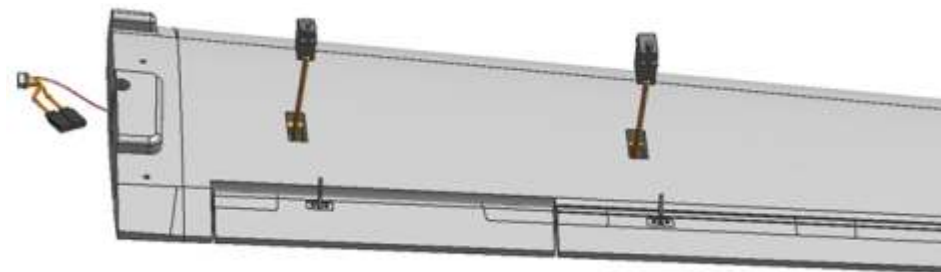
1. Install the landing gear on corresponding slot of fuselage, and fix with two pcs screws.



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 screws.



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



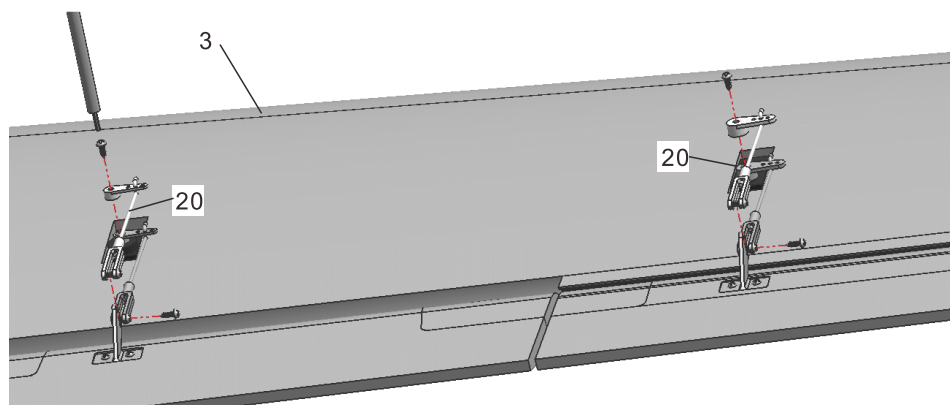
4. Insert the thread of aileron servo and flap servo into the corresponding slot of left wing, and put the servo on the slot.



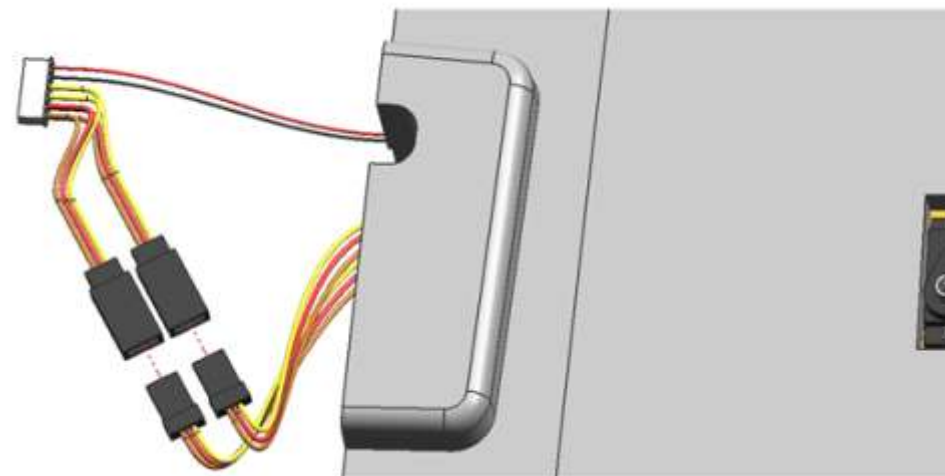
5. Fix the aileron servo and flap servo on left wing with screw.



6. Cross pushrod1 on servo arm.



7. Fix the pushrod 1 servo arm on the servo, put one head plastic clip of pushrod1 and fix on servo with screw.

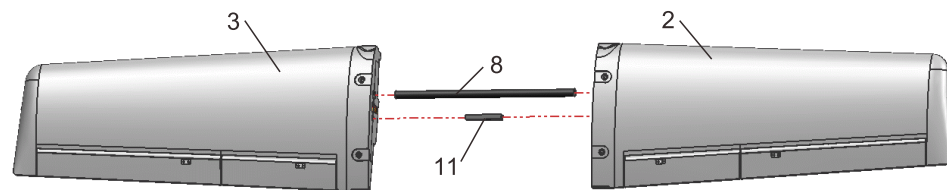


8. Connect the aileron servo thread and flap servo thread(male head) to corresponding female head.

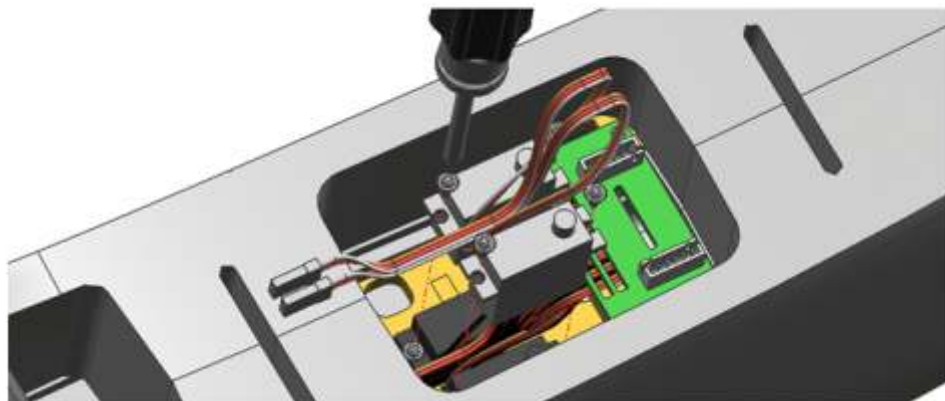


9. Insert the connected thread into the corresponding slot.

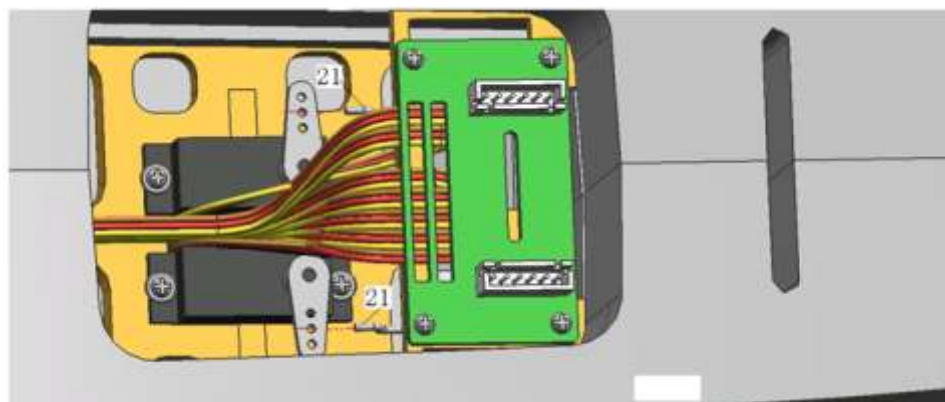
10. Repeat the left wing installation steps from 3 to 9, and install right wing well.



11. Connect right and left wing through wing connected batten



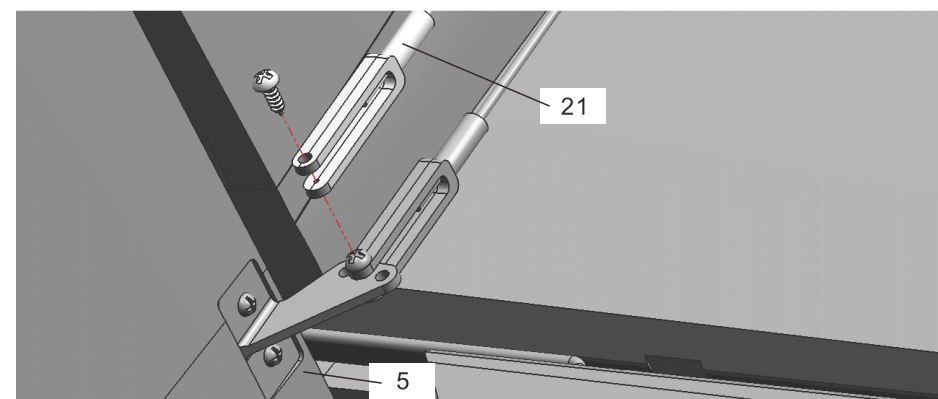
12. Install elevator servo and rudder servo in the corresponding slot of fuselage with screw.



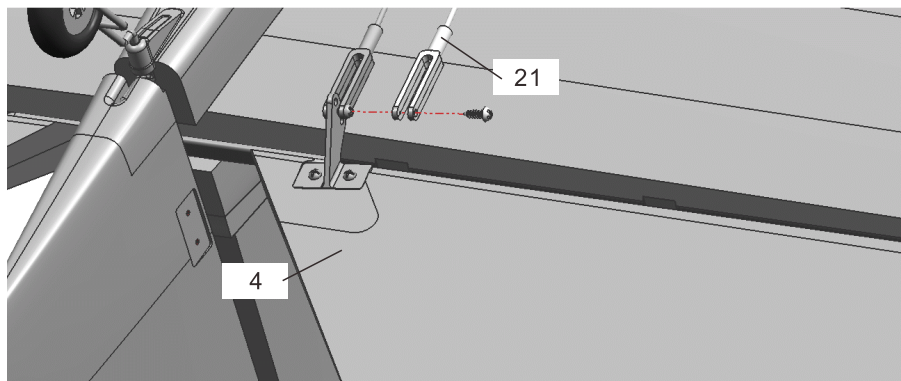
13. Cross pushrod2 on servo harm.



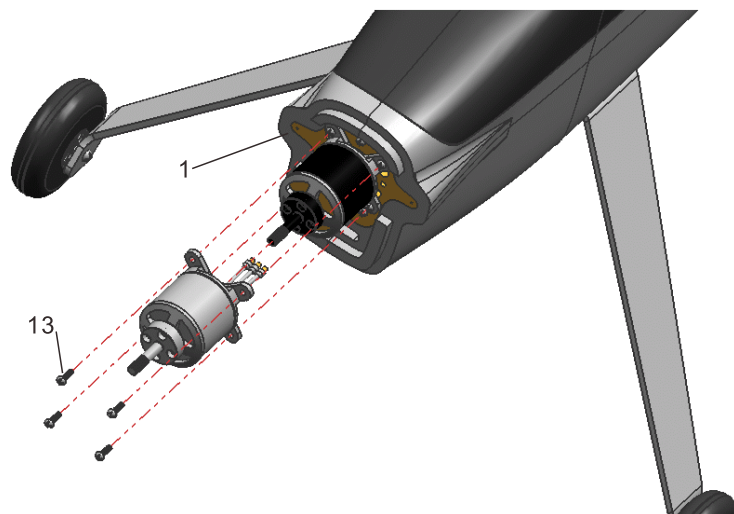
14. Put and fix the servo arm with pushrod2 on servo.



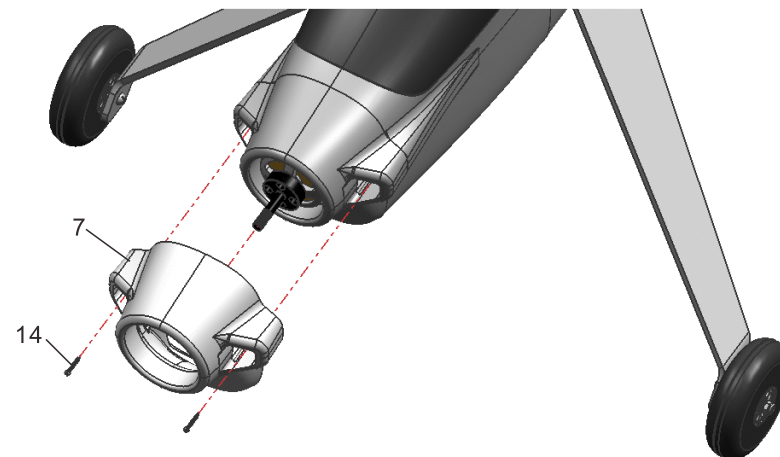
15. Installed one clip head of pushrod2 on rudder servo arm, fix on rudder with screw.



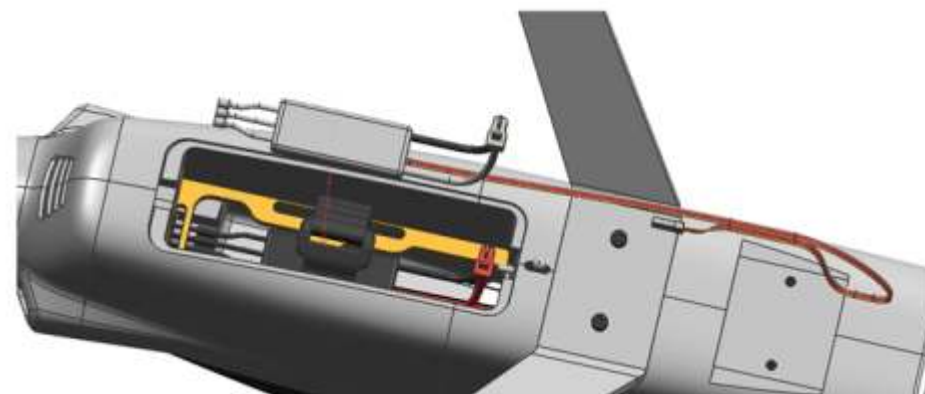
16. Installed one clip head of pushrod2 on rudder servo arm, fix on rudder with screw.



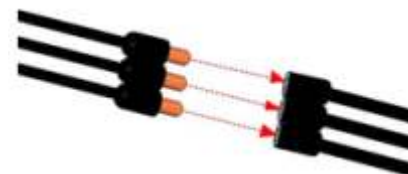
17. Fix the motor on the motor mount with screw.



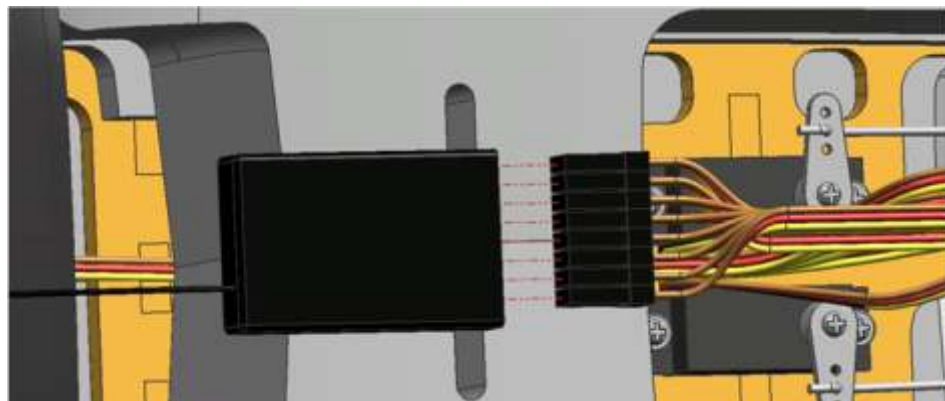
18. Put and install the nose covering on the nose with screw.



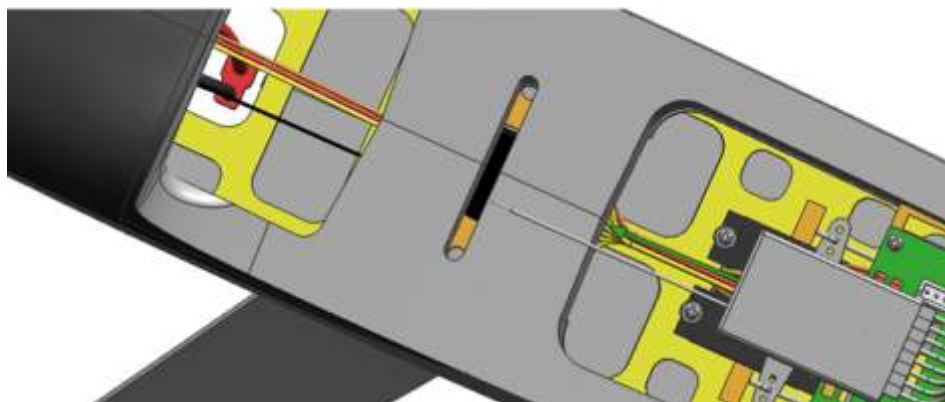
19. Put the ESC on the battery reinforcement plate, fix with velcro strap.



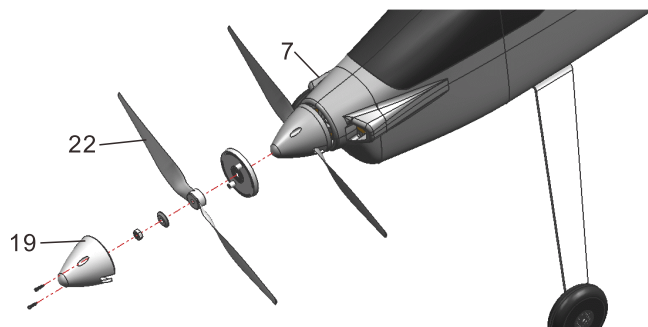
20. Connect the three thread power line to ESC three thread, after connection, please check if the motor positive inversion, if by reversal way, pull up arbitrary two thread of them, reconnect after exchanging, ensure the right direction of motor rotation.



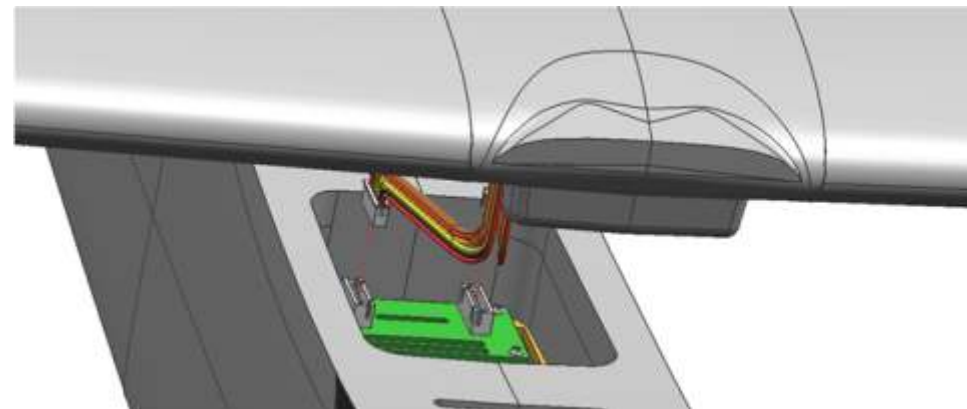
21. Insert all servo wires and esc signal lines to corresponding channel of radio in turn.



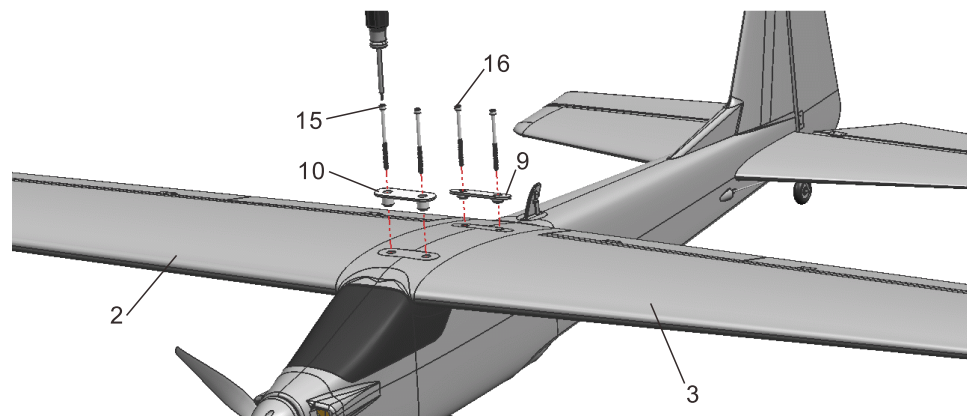
22. Insert the radio into the fuselage.



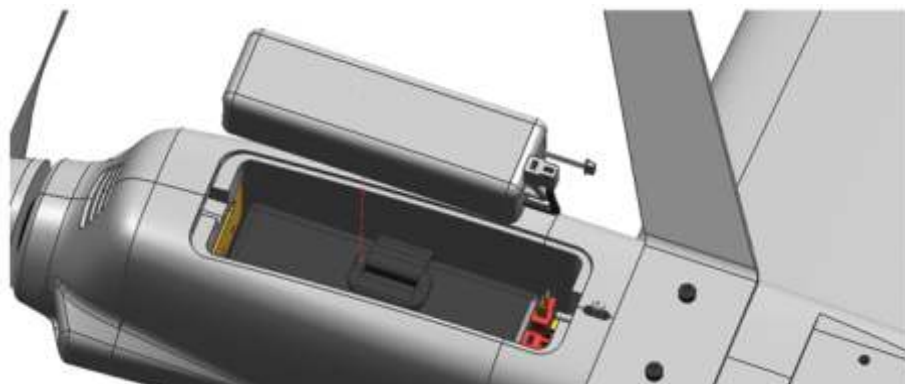
23. Fix the propeller on the motor with screw, and then fix the spinner with screw.



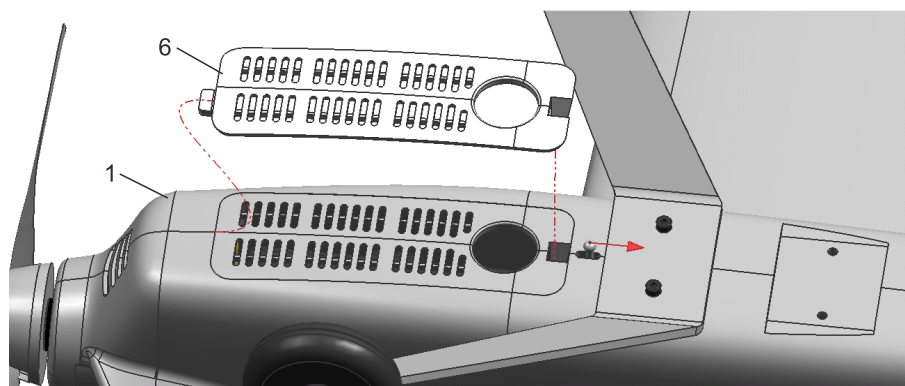
24. Insert the connected plug on the right and left wing to socket on PCB of fuselage.



25. Fix the wing on fuselage with screw.

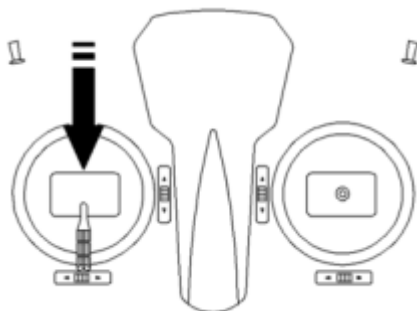


26.Put the battery on battery plate and fix with velcro strap.

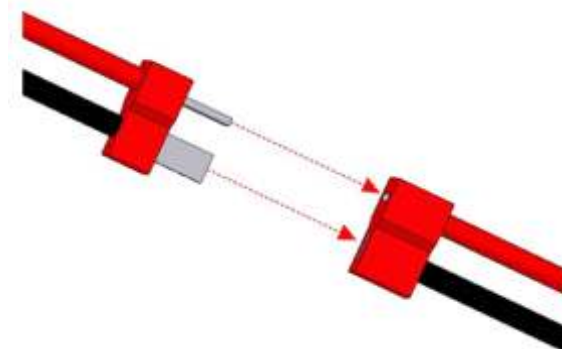


27.Put the equipment cabin on the corresponding of fuselage

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. Batteries discharged to a voltage lower than the lowest approved voltage may become damaged, resulting in loss of performance and potential fire when batteries are charged.

Control Surface Test

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

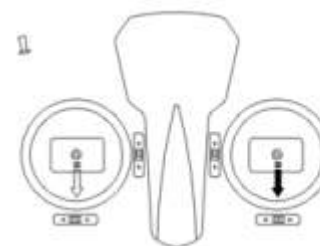


MODE 1

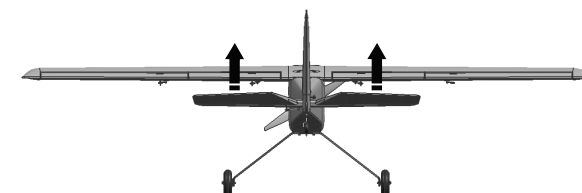


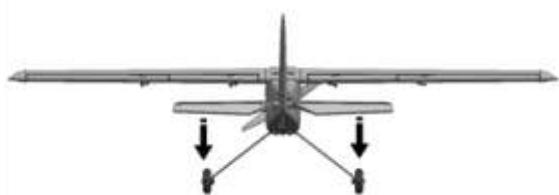
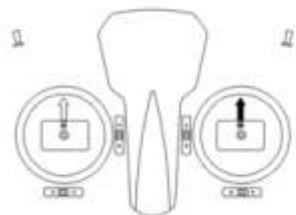
MODE 2

Test the Elevator



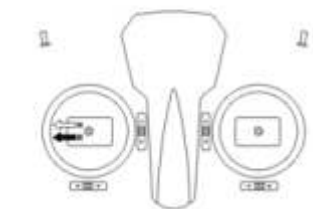
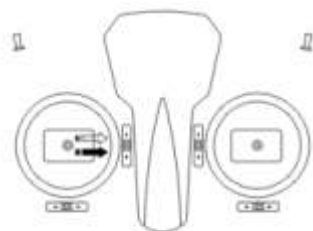
MODE 1 MODE 2





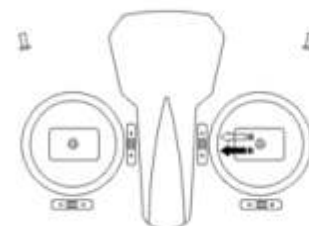
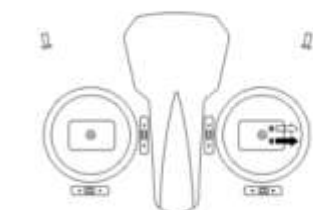
- Test your Elevator control by moving your elevator stick down and up. Make sure that the elevator responds according to the illustrations.

Test the Aileron



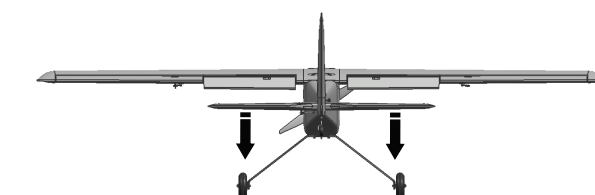
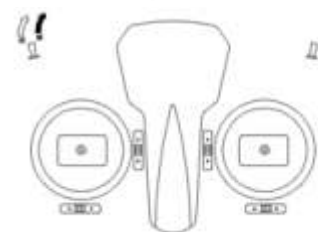
- Test your Aileron control by moving your aileron stick down and up. Make sure that the aileron responds according to the illustrations.

Test the Rudder



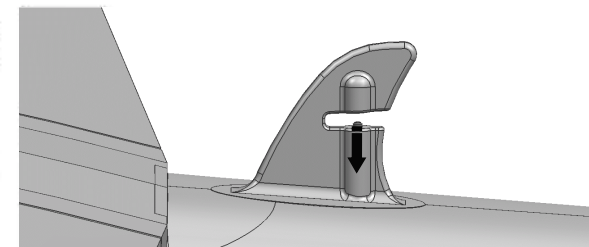
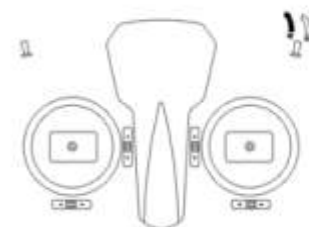
- Test your rudder control by moving your rudder stick left and right. Make sure that the rudder responds according to the illustrations.

Test the flap



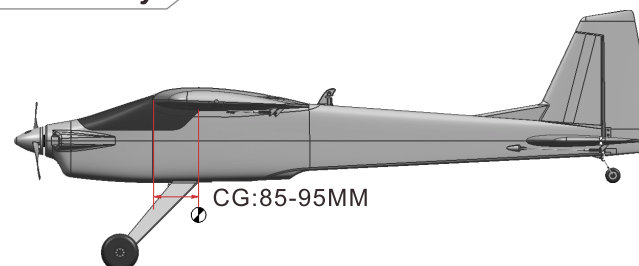
Test your flap control by moving flap stick down, Make sure that the flap responds according to the illustrations. We suggest to move 25-30° degree flap down, then we need to have elevator down (suggested 5-10° degree down).

Test the Tow Release



Test your tow release control by moving tow release stick, 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

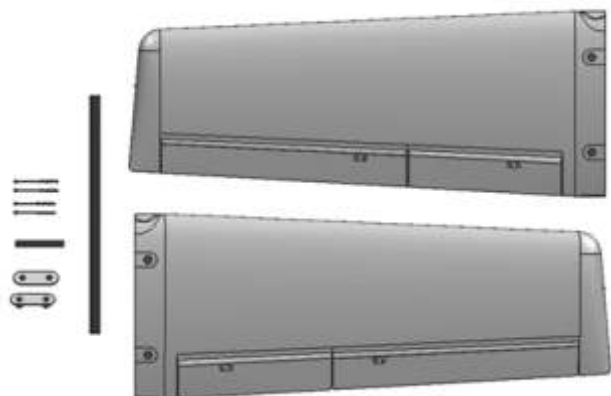
Safety is the First Commandment when flying any model aircraft. Third party insurance should be considered a basic essential. If you join a model club suitable cover will usually be available through the organisation. It is your personal responsibility to ensure that your insurance is adequate. Make 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. An excellent source of practical accessories is the **Techone Hobby** main catalogue, as our products are designed and manufactured exclusively by practising modellers for other practising modellers.

Always fly with a responsible attitude. You may think that flying low over other people's heads is proof of your piloting skill; others know better. The real expert does not need to prove himself in such childish ways. Let other pilots know that this is what you think too.

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 **Techone Hobby** team - hope you have many hours of pleasure building and flying your new model.

Wing



Fuselage



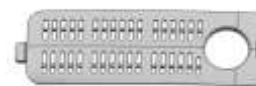
Stabilizer



rudder



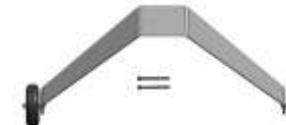
Equipment cabin



nose covering



Main landing gear



Spinner



pushrod set



wing connected batten



tail wheel



Plastic cover of wing



Plastic clip



servo horn



Equipment cabin



PCB



Motor: 3520 KV680



Servo: 17g micro servo



9g micro servo



Battery: 14.8V 4S 3300mAh Li-po 25C



ESC : 50Amp



Propeller: 14*7 SF prop



2.4G Radio



Charger



Notes

[illegible]