

SUPER-E is a new brand from Techone Hobby. It focus on the design and manufacture of electrical molded models. Innovation and concentration is our principle. SUPER-E will develop more electrical molded models to you all and give you brand-new flying experience.

Item.No: 08500



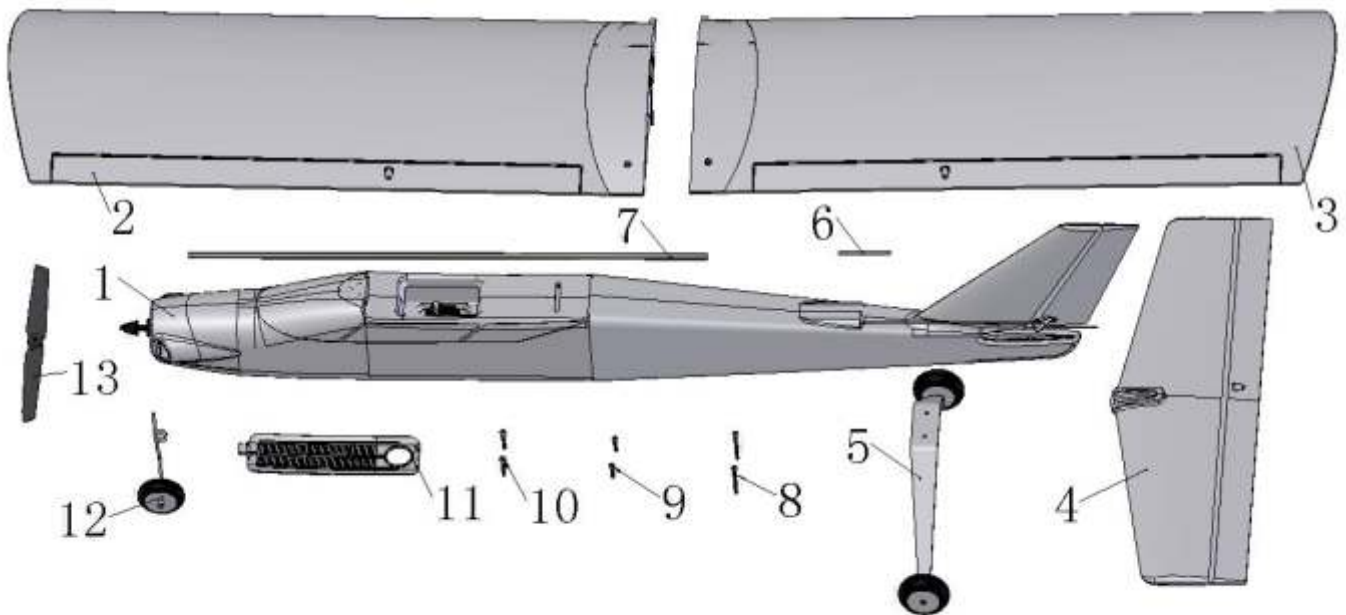
Examine your kit carefully!

Super-e 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!

Radio-controlled models, and especially model aircraft, are by no means playthings in the usual sense of the term. Building and operating them safely requires a certain level of technical competence and manual skill, together with discipline and a responsible attitude at the flying field. Errors and carelessness in building and flying the model can result in serious personal injury and damage to property. Since we, as manufacturers, have no control over the construction, maintenance and operation of our products, we are obliged to take this opportunity to point out these hazards and to emphasise your personal responsibility.

Features	3
Specifications	3
Charging the Flight Battery	4
Transmitter	4
Fly Control	5
Fly Trimming	6
Mounting the Landing Gear	6
Installing the Tail	6
Installing the Wing	7
Installing the propeller	7
Installing the Flight Battery	7
Connect the Flight Battery	8
Control Surface Test	8
Choose a Flying Field	8
Centre of Gravity	9
Binding	9
Motor Service	9
Servo Service	9



- | | |
|------------------------------------|------------------------|
| 1. Fuselage | 8. M3*40mm |
| 2-3. Wing Halves | 9. M3*15mm |
| 4. Horizontal Stabilizer /Elevator | 10. M4*20mm |
| 5. Main Landing Gear | 11. Canopy |
| 6. Wing Tube1 | 12. Front Landing Gear |
| 7. Wing Tube2 | 13. Propeller |

The RTF include



Features:

Saturn is a nice training plane for beginners. You can do route flight training, inverted flight, rolls, rolling loop etc. It's your no.1 choice in training planes.

1. 1200mm wingspan ensures its good wind resistance. And it's also easy to carry.
2. 3-point landing gear design and stronger & thicker materials used on landing gear sets ensure the stability and durability while taking off and landing. And the front wheel is synchronous coupled with rudder, it's flexible to control take-off.
3. Removable horizontal stabilizer makes it easy to carry.
4. The battery compartment which is in the belly of fuselage used a simple and reliable latch, you can easily replace the battery.
5. AS2216 motor from T Motor offers powerful supply when flying.
6. All complicated assembly steps are finished in our factory, you don't need to spend much time in assembly before enjoy the flying.

Specifications

SATURN	RTF	PNP	KIT+MOTOR
Motor T-Motor AS2216 KV 880	Installed	Installed	Installed
ESC T-Motor30A With BEC	Installed	Installed	Needed to complete
Servos Techone 8g servo	Installed	Installed	Needed to complete
Battery 3S 11.1V 1800mAh 20C Li-Po	Installed	Needed to complete	Needed to complete
Charger Super-E B3 2-to3-cell Li-Po Charger	Installed	Needed to complete	Needed to complete
Receiver Super-E SR-5 5-channel receiver	Installed	Needed to complete	Needed to complete
Transmitter Super-E T-4 2.4G	Installed	Needed to complete	Needed to complete

SATURN Specification	
Wingspan	48.4 in (1230 mm)
Length	38.6 in(980 mm)
Weight (with battery)	2.02 lb-2.20 lb(920g-1000g)
Propeller:	SF 1060 prop or SF1070 prop

Charging the Flight Battery



1. Connect the B3 Pro charger to power, while the three power LEDs will turn from red to green, which indicating that the charger works in good order.



2. Connect the battery pack to 3s balance port, while the three power LEDs will all turn into red and charging begins. Please note once the charging of one cell is done, the corresponding power LED for it will turn green.



3. When the three power LEDs all turn green, the charging for 3S battery pack is finished. **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

Input Voltage:	110-240 V AC
Output Current:	3× 800mA
Display:	3× Bicolor LED
Max. Charging Current:	3× 850 mA
Size:	100 mm * 60mm * 35mm
Weight:	180 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

Mode1



Mode2



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.

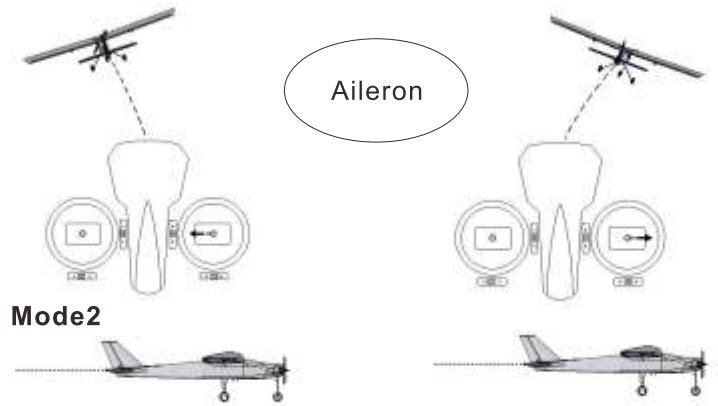
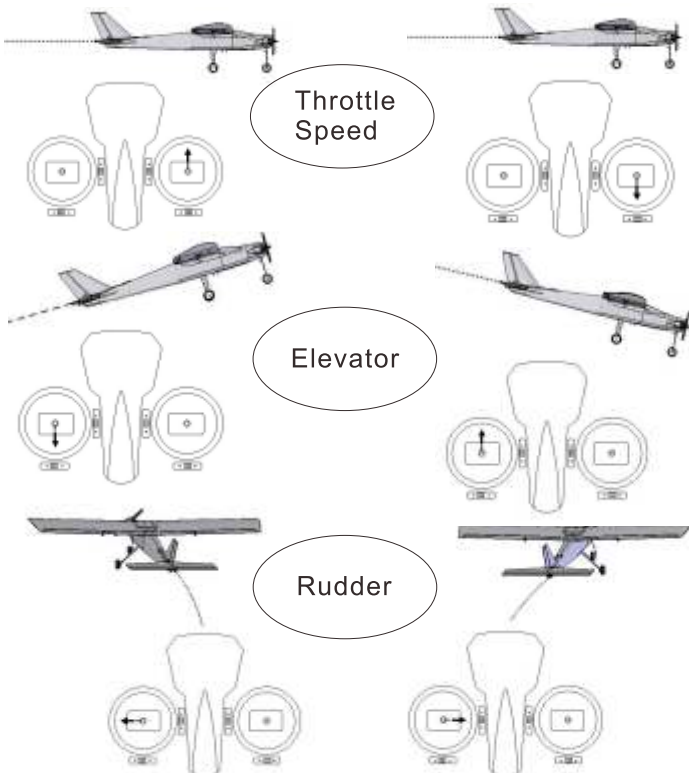
CAUTION: Do not pick up the transmitter by the antenna. Do not alter or put weight on the antenna. Damage to antenna parts can decrease transmitter signal strength, which can result in loss of aircraft control, injury or property damage.

Fly control

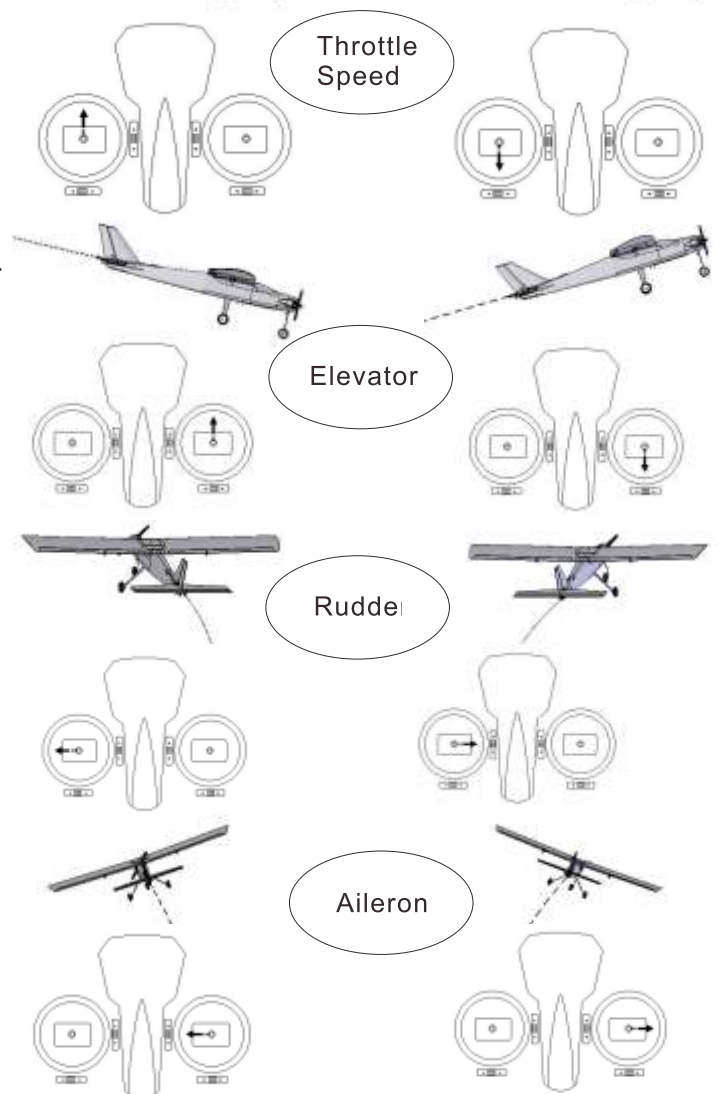
For smooth control of your aircraft, always make small control moves. All directions are described as if you were sitting in the aircraft.

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).

Mode1



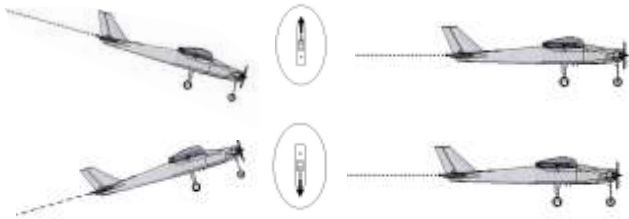
Mode2



- 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

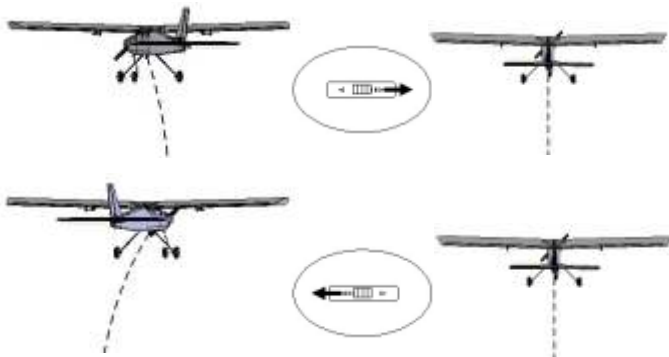
Elevator trim:



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

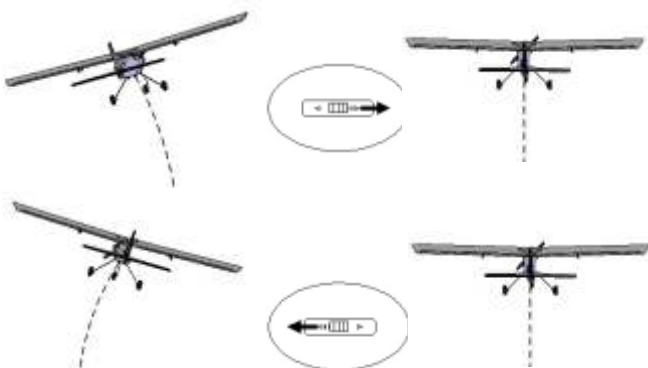
- When the aircraft's nose drifts up or down while the elevator stick is at neutral (centered) position, push the elevator trim button by one or two "beep" increments OPPOSITE the direction of drift.
- Adjust trim so the aircraft flies straight and level when the elevator stick is neutral.

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.

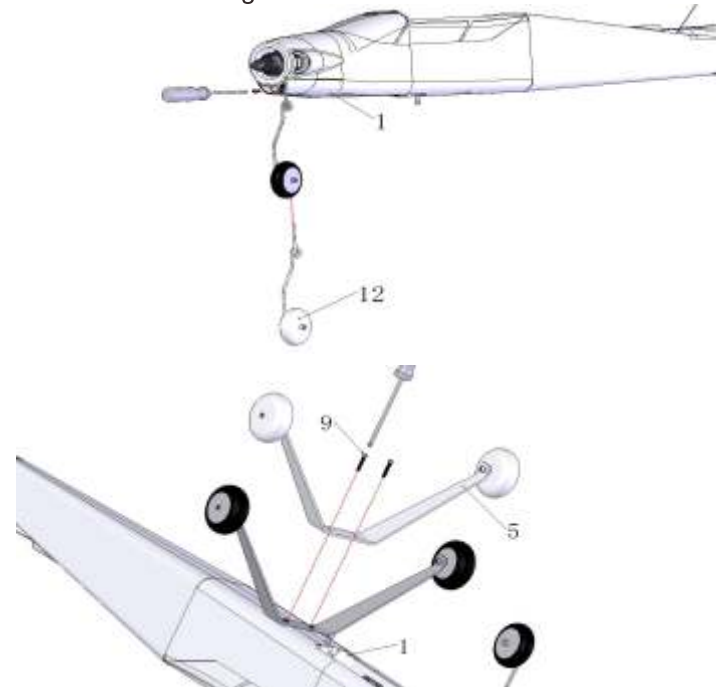
Aileron Trim



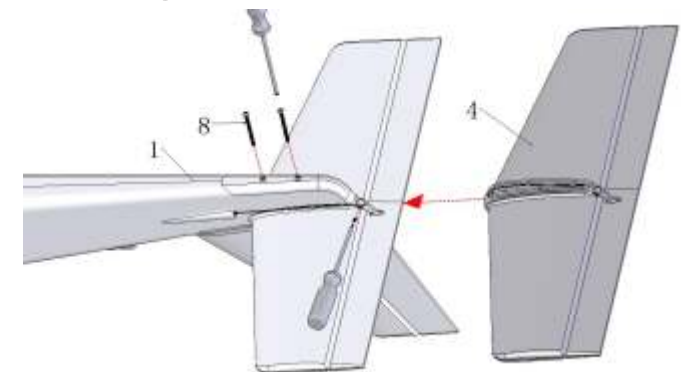
- When the aircraft roll left or right while the aileron stick is at the neutral position (centered), push the aileron trim button by one "beep" increments OPPOSITE the direction of drift.

Mounting the Landing Gear

If you want to take off from a run way. You need to mount the Landing Gear.



Installing the Tail



1. Insert Horizontal Stabilizer into the slot between fuselage and rudder, then screw 2pcs screws by screwdriver to fix the stabilizer.

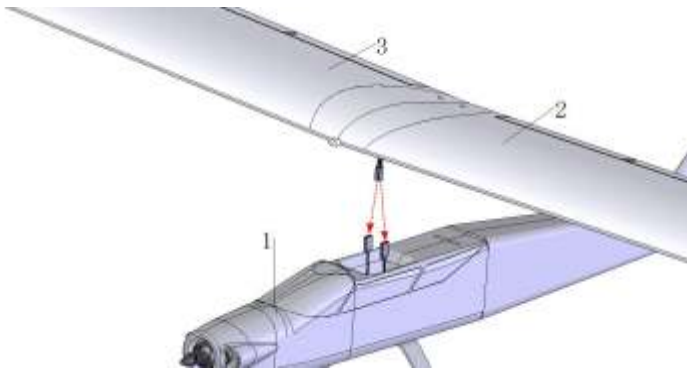


2. Install the linkage in a hole in the control horn using a link cover.

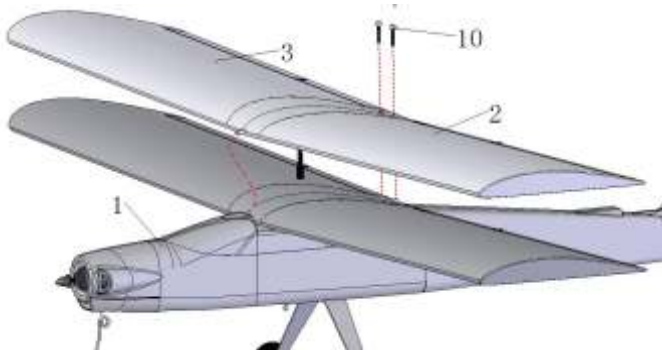
Installing the Wing



1. Insert wing tube 2 (7) into the hole in the left wing, then slide the right wing onto the tube. And wing tube 1 (6) was fixed on left/right wing in advance to avoid distortion on both wings.



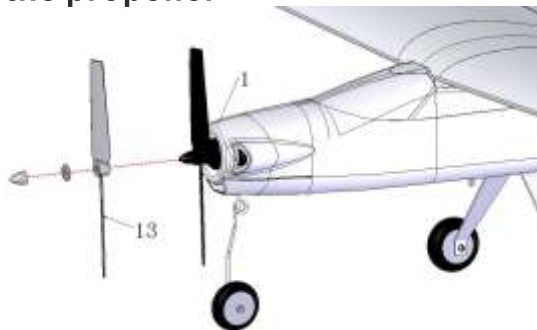
2. Connect the aileron servo wires connectors from the wing to the Y-harness in the fuselage of the aircraft.



3. Insert the bolt in the front of wing into corresponding hole in fuselage, and align the screws holes on wing and fuselage, then use screwdriver to fix 2pcs M4*20mm screws into the screw holes.

CAUTION: Before each flight, make sure the front and trailing edges of the wing are exactly centered on the fuselage.

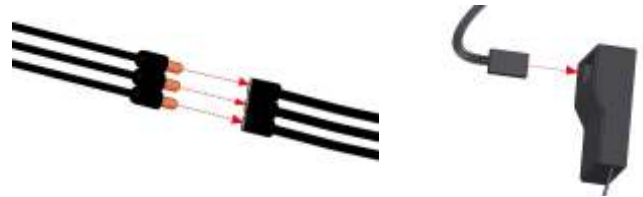
Installing the propeller



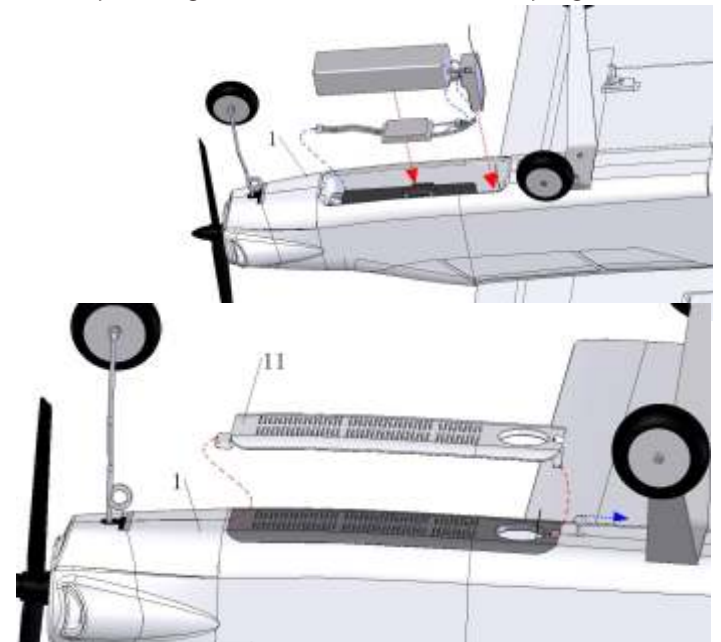
1. Power off the ESC switch on the side of the fuselage or disconnect the flight battery from the aircraft.
2. Remove the spinner nut from the collet shaft .
3. Install a balanced propeller on the collet shaft using the spinner nut with the numbers on the propeller facing the front of the plane.
4. Put the shaft of a tool (for example, a screwdriver) in the hole in the side of the spinner to tighten the spinner on the collet shaft.

Remove the propeller in reverse order.

Installing the Flight Battery

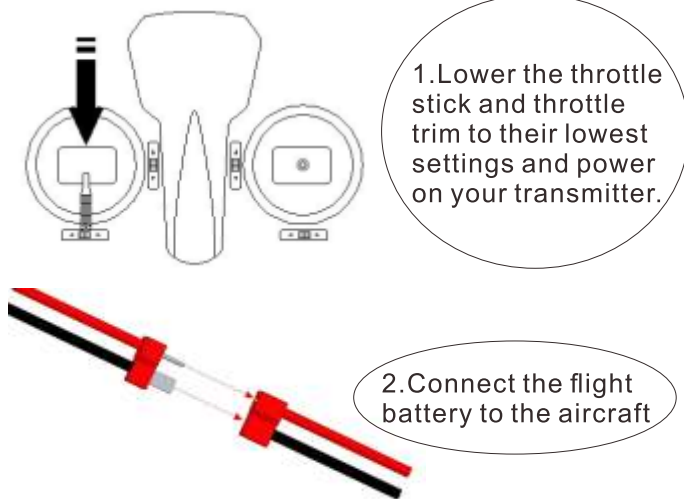


1. After connect the wires of motor and ESC, check the motor rotating direction. If it's reverse, please exchange 2 wires by random and reconnect, make sure the rotating direction is correct.
2. Connect servo wires and ESC wires into corresponding channels in receiver and plug in.



1. Open the canopy.
2. After put ESC on plastic piece inside the fuselage, place the battery inside, then use velcro to fix ESC and battery.
3. Install the flight battery (Do Not connect the wires at this time)
4. Insert receiver into pre-reserved hole inside the fuselage.

Connect the Flight Battery



3. 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.

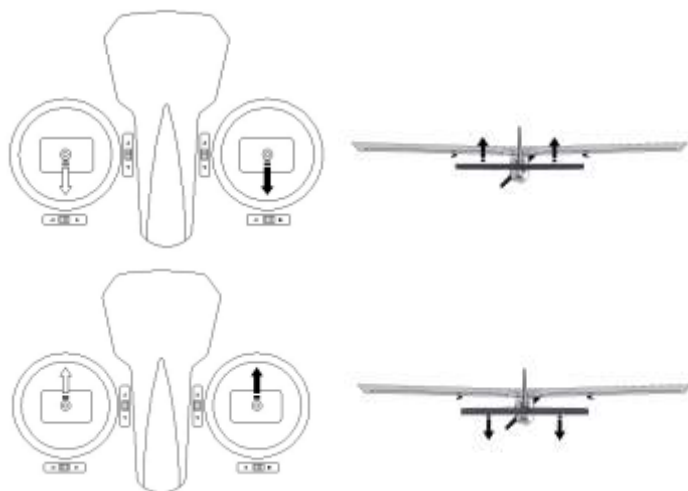
Control Surface Test

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

← MODE 1

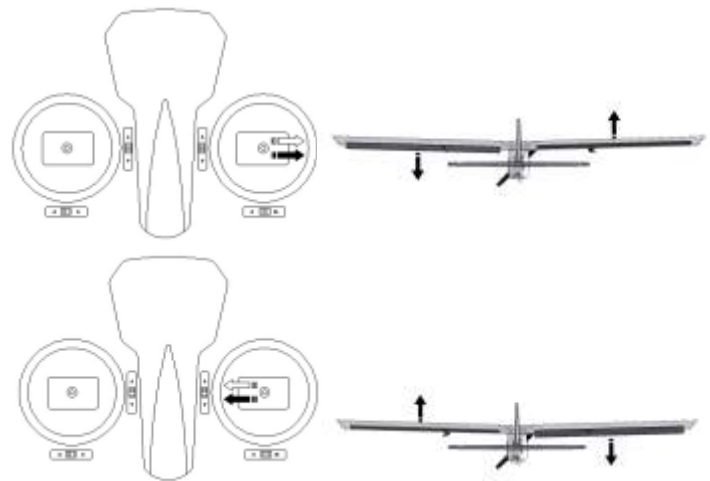
← MODE 2

Test the Elevator



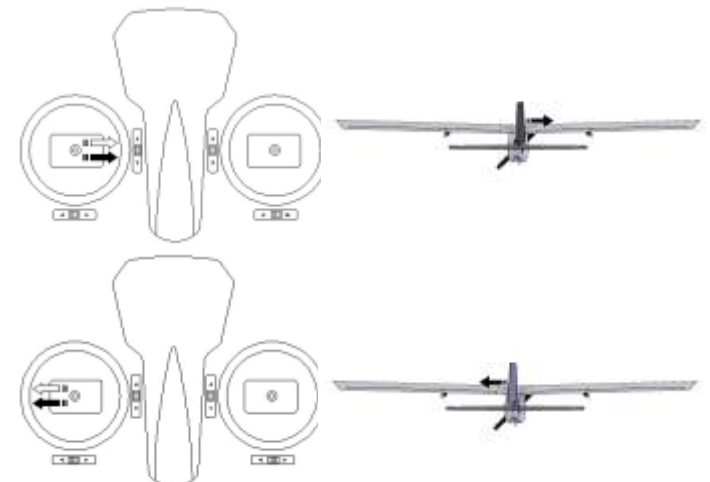
- Test your Elevator control by moving your elevator stick down and up. Make sure that the elevator responds according to the illustrations.

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.

Choose a Flying Field

In order to have the most success and to protect your property and aircraft, it is very important to select a place to fly that is very open. Consult local laws and ordinances before choosing a location to fly your aircraft.

The site should:

- Have a minimum of 200m of clear space in all directions.
- Stay clear of pedestrians.
- Stay free of trees, buildings, cars, power lines or anything that could entangle your aircraft or interfere with your line of sight.

Remember, your aircraft can reach speeds of up to 25–30 mph (40–48 km/h), so it can cover ground quickly.

Plan on flying in an area that gives you more space than you think you need, especially with first flights.

Centre of Gravity



The centre of gravity (CG) should be at a position of 75-80mm away from leading edge, please refer to above picture.

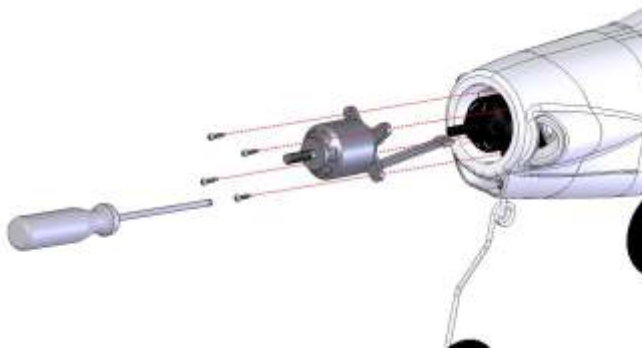
Binding

Turn on the transmitter, then connect the power of receiver keeping the receiver BIND button till the light turn on GREEN which means the binding is successful. After that, it's unnecessary to bind again.

CAUTION: make sure the RX and TX is within one meter, and around 10 meters no similar device.

If the light flashing, showing the binding failure. Please do again as above indication.

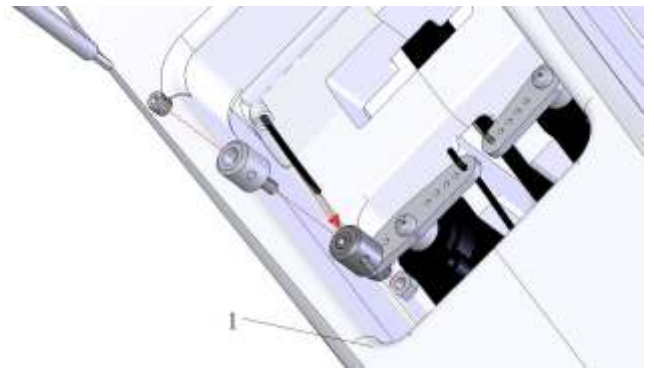
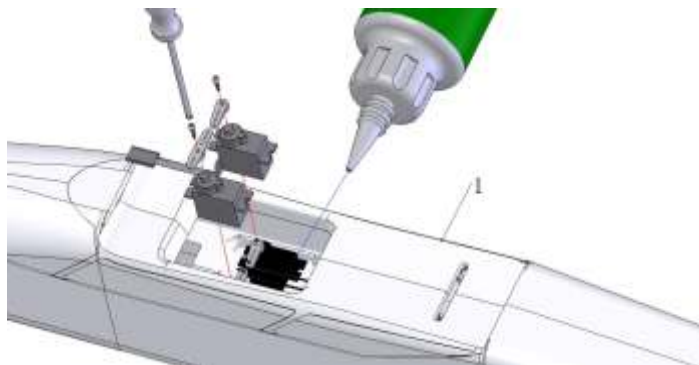
Motor Service



1. Thread motor wires through the holes under motor and into fuselage.
2. Install motor onto motor mount, and use screws to fix.

Servo Service

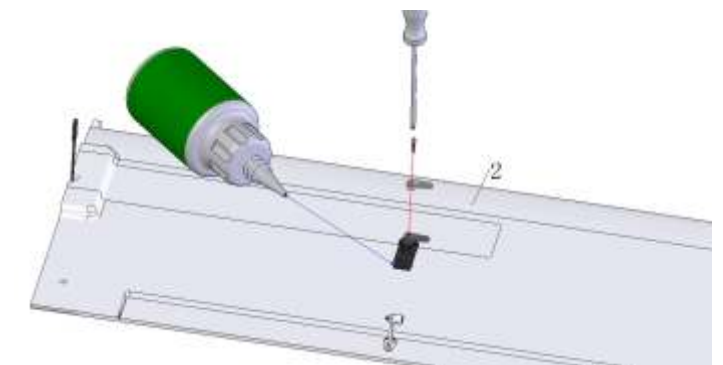
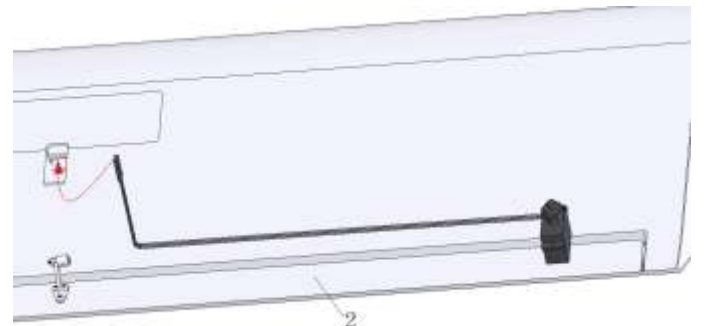
Tail Servo Service



1. Use screws to fix servos onto the servo mount inside fuselage. Make sure the servo wires are correctly oriented as picture shown.
2. Front wheel and rudder is couple-linked to one servo, so please refer to above picture and install rudder and front wheel swerve push rods.

Wing Servo Service

Install the control horns.



The servos are installed in the servo house in the wing panels.



Connect the pre-formed end of the pushrods to the servo output arms, and connect the plain end to the swivel connectors on the control horns as shown.

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 SUPER-E 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 SUPER-E team - hope you have many hours of pleasure building and flying your new model.

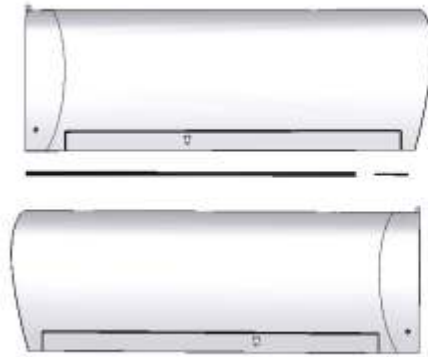
www.super-emodel.com
www.techonehobby.com

Email: salestechone@gmail.com
hobbytechone@gmail.com
techonesales4@gmail.com

Saturn Red: 08500R

Saturn Blue: 08500B

Item.No: 08501
Wing



Item.No: 08502
Fuselage



Item.No: 08503
Stabilizer



Item.No: 08504
Landing gear sets



Item.No: 08505
Front landing gear



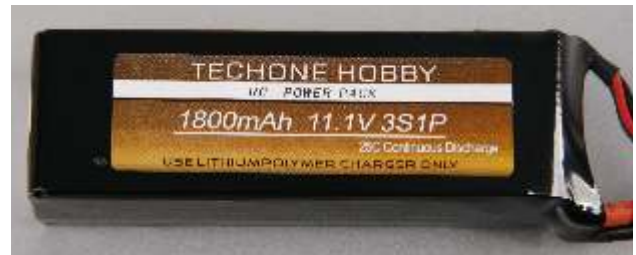
Item.No: 08506
Motor: AS2216 KV880



Item.No: 08507
Servo 8g micro servo



Item.No: 08508
Battery 11.1V 3S 1800mAh Li-po 20C



Item.No: 08509
ESC :30A



Item.No: 08510
Propeller: 1070 SF prop



Item.No: 08511
2.4G Radio



Item.No: 08512
Charger



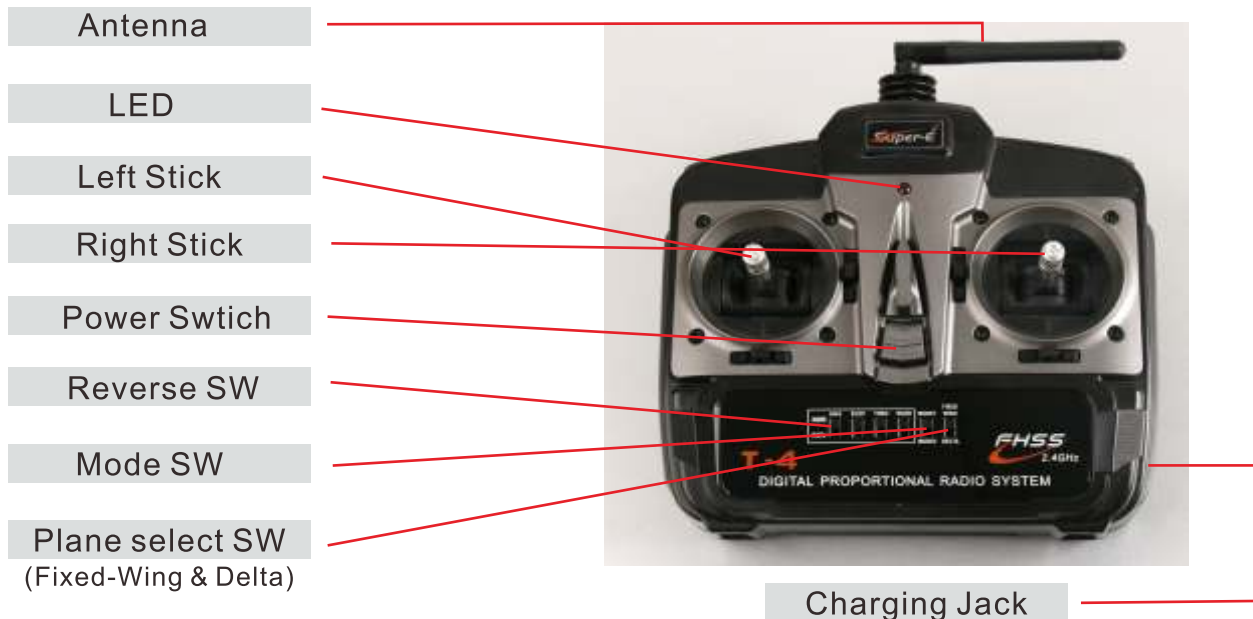
T-4

2.4G FHSS Techonlogy

4-Channel 2.4G Digital Proportional Radio System INSTRUCTION MANUAL

Thank you for purchasing our R/C system.

Before using, read this manual carefully.



WARNINGS

- The product is not intended for those under 14 years of age without proper adult supervision. The product is not a toy. It is a precision machine requiring proper assembly and setup to avoid accidents and it is the responsibility of the owner to operate this product in a safe manner as it can cause serious personal injury and damage to property due to carelessness or misuse.
- The spinning rotors on this product can be dangerous! When operating/flying, always be aware of the spinning rotors. Be careful not to let them come close to your body, other people or loose clothing. Keep your hands, fingers and any articles of clothing away from the rotors.
- Do not attempt to disassemble or modify any of the product components without the assistance of an experienced RC user. Only use the correct type of battery to operate. Using any wrong type of battery will damage the product and possibly make it dangerous to operate.
- The motor(s) may get hot during use. Always allow 10-15 minutes between each flight for the motor to cool down. This will prolong the life of your product.
- Choose an appropriate operating site consisting of flat, smooth ground, and clear open filed. Do not operate near buildings, high voltage cable lines, or trees to ensure safety operation. Operate in safe area only, away from other people. RC models are prone to accidents, failure, and crashes due to a variety of reasons including, lack of maintenance, pilot error, and radio interference. Pilots are responsible for their actions and damage or injury occurring during the operation.
- Do not operate in inclement weather, such as rain, wind, snow and darkness.
- The product is composed of precision electrical components. It is critical to keep the product away from moisture and other contaminants. Do not allow them to get wet. Electrical damage may occur that could affect safe operation.

- After each use, always allow the battery to cool down before recharging. When charging the battery pack, do not overcharge! If batteries get hot during charging, discontinue charging immediately and disconnect the battery from the charger. Never leave battery unattended while charging. If you are unsure of how to charge this battery, please seek the advice of experienced RC users. Never let children charge the battery without adult supervision.
- Always turn on the transmitter before connecting the battery on the model. When turning off the model, always disconnect the battery first, and then turn off the transmitter. If the order is reversed, the model may become uncontrollable and cause serious damage.
- If you are in doubt of your ability to operate the model, we strongly recommend that you seek assistance from experienced RC users or join your local model flying club to gain the required knowledge and skill. As the manufacturer and distributor, we assume no liability for the use of this product.

- Before turning on your model and transmitter, please check to make sure no one else is operating under the same frequency. Frequency interference can cause your model, or other models to crash. The guidance provided by experienced RC users will be valuable for the assembly, tuning, timing, and actual first flight.
- Never allow batteries to run low or you might lose control of the model.
- You should complete a successful pre-flight check of your radio equipment and model prior to each flight.
- Plastic is very susceptible to damage or deformation due to extreme heat and cold climate. Do not store the model near any source of heat such as oven or heater. Store the model indoors, in a climate-controlled, room temperature environment.

2.4G Binding

1. The Binding processing

Turn on the transmitter, then connect the power of receiver keeping the receiver "BIND" button till the light turn on GREEN which means the binding is successful. After that, it's unnecessary to bind again.

Caution: make sure the RX and TX is within one meter, and around 10 meters no similar device.

If the light flashing, showing the binding failure, please do again as above indication.



Connection Diagram(For DELTA)

Switch	Switch 1	Switch 2	Switch 3	Switch 4	Switch 5	Switch 6
Reverse	Aileron Reverse	Elevator Reverse	Throttle Reverse	Rudder Reverse	Mode 1 Model 2	Fixed-Wing Delta

Receiver channel distribution:

CH1:Aileron; CH2: Elevator; CH3:Throttle; CH4:Rudder;

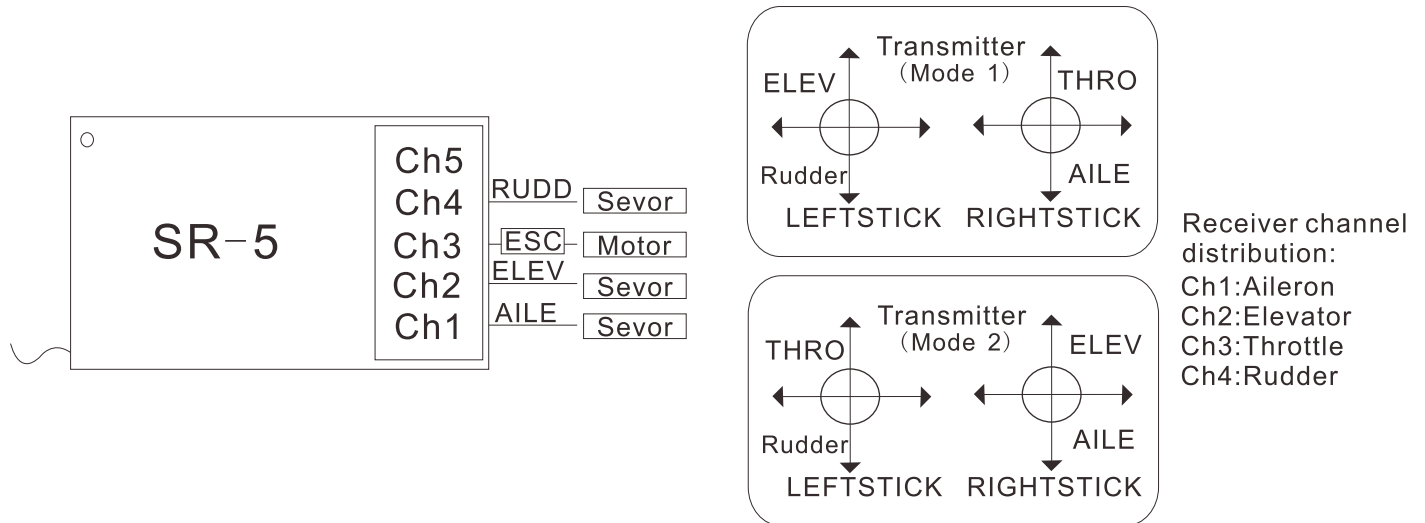
Switch to "DELTA" position and enter DELTA mode, aileron and elevator is mixed, as for triangle planes, tailless planes.

Transmitter	Receiver channel mixing	
Stick	Ch1	Ch2
Aileron Stick	+50%	+50%
Elevator Sticker	+50%	-50%

Connection Diagram(Fox FIXED-WING)

Switch to "FIXED-WING" position and enter Fixed-Wing Plane mode.

Switch	Switch 1	Switch 2	Switch 3	Switch 4	Switch 5	Switch 6
Reverse	Aileron Reverse	Elevator Reverse	Throttle Reverse	Rudder Reverse	Mode 1 Model 2	Fixed-Wing Delta



Technology Data

Transmitter

Item:T-4
 Channels:4
 Resolution:4096
 Frequency:2.4GHZ ISM Frequency range
 Modulation:GFSK
 Spread Spectrum Mode:FHSS
 Number of frequency channels:20
 Hopping rate:240Jump/S
 Output Power:<=20dBm
 Working current:<= 150mA
 Working voltage:1.2V×4N iCad/NiMH
 Dimensions:200mm×185mm×105mm
 Net Weight:474g

Receiver

Channel:5
 Frequency:2.4G ISM Frequency range
 Spread spectrum mode:FHSS
 Power:4.5-5.5V/<30mA
 Net weight:11g
 Measurement:41×28×14mm