

# A-1 SKYRAIDER & TEMPEST & F4U CORSAIR

# Radio Control Model Airplane OPERATION MANUAL





A-1 SKYRAIDER

**TEMPEST** 



F4U CORSAIR

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# **Statement:**

- 1.Please read this manual carefully and follow the instructions before you use this product;
- 2. Your airplane is not a toy, and is only suitable for experienced fliers or 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 that fingers and other parts of your body are out of the way of rotating parts of the plane, or it may cause damage to the plane or injury to your body.
- 5.Do not fly in a thunderstorm, strong winds or bad weather.
- 6. Never fly your plane where there are power lines overhead, automobiles, near an airdrome, railway or highway.
- 7. Never fly your plane where there are crowds of people . Give yourself plenty of room for flying, as the plane can fly at a 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 user should bear full responsibility of proper operation and usage with regards to this model. We, Top Motionrc together with any distributor of ours will not be responsible for any liability or loss due to improper operation.

Thank you for choosing the remote control model airplanes, we hope that this aircraft will bring you endless fun. This aircraft is with very stable flight and easy to control, it can finish the level flight and inverted flight fluently, it also can finish inside loops and outside loops, axial rolls and other aerobatic manoeuvre.

The scaled appearances and details give people strong visual impact.

With ball link connectors that it gives you a high precision control.

The efficient four-blade propeller and high torque brushless motor give you an outstanding flight experiences.

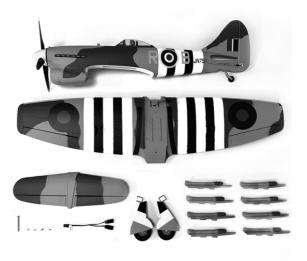
## **Product constitution**

### PNP version

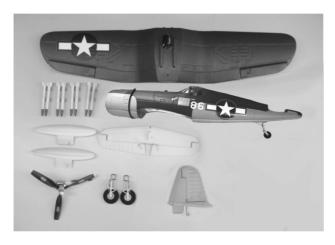
Fuselage, Main Wings, Horizontal Wing, Main Landing Gear, Propellor, Bomb, Guided missile, Auxiliary Oil Tank, Accessory Bag.



**A-1 SKYRAIDER** 



**TEMPEST** 



**F4U CORSAIR** 

### **Main specifications**

	A-1 Skyraider	Tempest	F4U Corsair	
★ Wingspan	800mm/31.50inch	800mm/31.50inch	750mm/30.00inch	
★ Length	625mm/24.60inch	678mm/26.70inch	610mm/24.02inch	
★ Weight	455g	455g	420g	
★ Thrust	≥450g	≥450g	≥450g	
★ Motor	Skynetic Hollow S	DST-1300 Brushless Motor		
★ ESC	20A Brushless ESC			
★ Servo	9g Plastic X 4			
★ Flying Time	≥5 min			

### Required

	A-1 Skyraider	Tempest	F4U Corsair
★ Radio system	4 + Channel		
★ Receiver	4 + Channel		
★ Battery	3 Cell 11.1V 1000mAh with JST connector		
<b>★</b> Chager	4 Cell compatible battery charger		

### Assemble processes(A-1 SKYRAIDER)

1. Assembly of the landing gear Take out the main wing, two landing gears and 2pcs screws PWA2\*8mm. Insert the two landing gears into the assembling slots at the bottom of the main wing. Secure the main landing gears with the screw PWA2\*8mm.



3.Assembly of the horizontal stab Take of the horizontal stab and install it to fuselage, please make sure that the horizontal stab should be assembled to right place completely.



2.Assembly out the main wing.
Take of the fuselage& KM4\*35MM screws
Connect aileron servo wires, and install the main
wing to the fuselage. Then lock
the main wings by screws(KM4\*35MM).



4.Assembly of the control horns Connect the control horns of rudder and elevator, and make sure the pushrod is at the outermost hole on control horns.



# Assemble processes(A-1 SKYRAIDER)

### 5. Assembly of the scaled parts.

Take of the guided missile & bomb & auxiliary oil tank. Please classify the guided missile and bomb by left and right(left parts with number "L"). Then install them to the appropriate place of main wing by EPO glue.



6.Assembly of the gun.
Please install the gun to the appropriate place at the leading edge of the main wing.



8.Motor replacement for A1-Skyraider Firstly unlock the screw on the bottom of the fuselage in the nose, then plug out the motor from ESC. You can replace the motor easily.



9. Check thecenter of gravity and make sure that the CG of the plane should be within the range as indicated by the arrows.



7. Finished the assembly of "A1 SkyRaider" .





# **Assemble processes(TEMPEST)**

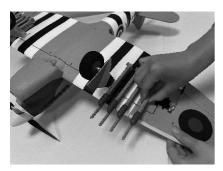
1.Assembly of the main landing gear.
Take of main wings & left and right landing gears & PWA2\*8MM screws from the box. Install the landing gear to the assemble groove at the bottom of main wings (Please do not invert left and right landing gear), then lock the main landing gear by screws(PWA2\*8MM)



3. Take of the horizontal Stab and install it to fuselage, please make sure that the horizontal stab should be assembled to right place completely.



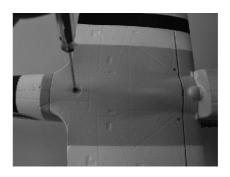
5. Assenbly of guided missile. Take of the guided missile. Please install it to the appropriate place under the main win by EPO glue.



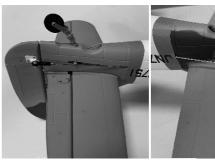
7. Motor replacement for Tempest Firstly unlock the screw on the top of the fuselage in the nose, then plug out the motor from ESC. You can replace the motor easily.

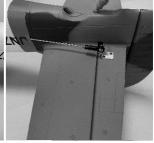


2.Assembly of the main wing. Take of the main wing & KM4\*45MM screws. Connect aileron servo wires, and install the main wing to the bottom of fuselage. Then lock the main wing by screws(KM4\*45MM)



4. Assembly of the control horns Connect the control horns of rudder and elevator, and make sure the pushrod is at the outermost hole on control horns.



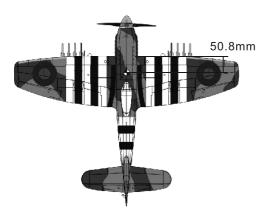


6. Finished the assembly of "Tempest".





8. Check the center of gravity and make sure that the CG of the plane should be within the range as indicated by the arrows.



### Assemble processes(F4U CORSAIR)

1.Take of the main wings& main landing gear& PWA2\*8MM screws from the box. Please assemble the main landing gear into the slot under the main wings, and please do not make it reverse, then lock the main landing gear by PWA2\*8MM screw.





2.Take of the fuselage&KM4\*35MM screw from the box and assemble the fuselage to the right place on the main wings, please use the screw(KM4\*35MM) to lock it.



3.Add some glue to the slot of the fuselage and assemble the horizontal wing to the fuselage firmly





4.Please make sure that the tail wheel should be in the neutral position, and add some glue to the rudder surface .Make sure the U plug should be inserted into the U slot of the fuselage, then glue the vertical wing&horizontal wing&fuselage together.







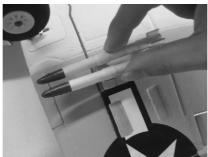
5. Glue the vertical wing and horizontal wing, and connect the elevator steel wire





6.Take of the guided missile&bracket set from the box, and add some glue to the bottom of the bracket, please glue it to the slot of the main wings.





7. Take of the auxiliary oil tank and add some glue to its surface, please glue it to the slot of the back part of the main wings.

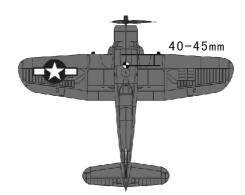




8. Finish the assembly of the "F4U CORSAIR" .

9. Check the center of gravity and make sure that the CG of the plane should be within the range as indicated by the arrows.





10.Motor replacement for F4U Corair Firstly unlock the screw on the top of the fuselage in the nose, then plug out the motor from ESC. You can replace the motor easily.



#### Safety precautions

- 1.If you have the simulator, we suggest that you can practise your skill by the simulator before you fly
- 2.Please climb the plane above the 50 meters with half throttle to fly it when you fly it for your first time, then you will be familiar with the performance of this plane.
- 3. You should learn how to control this model blandly, it will reduce the possibility of crash and prolongthe usage life of the plane.
- 4. The turn radius should not be too little, or it will stall and it will increase the possibility of crash.
- 5. When taking off or landing the plane, you should against the wind.
- 6.Do not fly the model over your head or behind you, you should fly the model in front of you.
- 8.Check the center of gravity and make sure that the CG of the plane should be within the range as indicated by the arrows.

#### **Notification for ESC**

- 1.The function of this ESC was in the best condition after factory setting; please do not change it by yourself.
- 2.Before connecting the battery, please make sure the throttle and trim were in the lowest position. If thethrottle and trim were not in the lowest position by mistake after connecting the battery, you can cut off the battery; move the throttle and push to the lowest position, then connect the battery.
- 3. The ESC of the airplane was in a good cooling position after factory assembly; please do not move its position.
- 4.The ESC should be connected to the brushlless motor correctly, otherwise the motor will be reversed turning, and the model airplane can not fly correctly.

# **Spare parts (A-1 SKYRAIDER)**



No:SKY1064-100 A-1 Skyraider Fuselage



No:SKY1064-101 A-1 Skyraider Main Wings



No:SKY1064-102 A-1 Skyraider Horizontal Stab



No:SKY1064-103 A-1 Skyraider Prop Hub



No:SKY1064-104 A-1 Skyraider Propeller



No:SKY1064-105 A-1 Skyraider Bomb



No:SKY1064-106 A-1 Skyraider Brown Auxiliary Oil Tank A-1 Skyraider Guided Missile



No:SKY1064-107



No:SKY1064-108 A1- Skyraider Main Landing Gear



No:SKY1064-109 A-1 Skyraider Pushrod Set



No:SKY1064-110 A1- Skyraider Screw Set



No:SKY5015-012 9g Servo with 150mm (5.9") Lead



No:SKY6003-015 20A Brushless ESC



No:SKY6000-025 Sky netic Hollow Shaft DST-1200 Motor



No:SKY5015-013 Sky netic 9g Servo with 250mm (9.8") Lead



No:SKY1065-100 Tempest Fuselage



No:SKY1065-101 Tempest Main Wings



No:SKY1065-102 Tempest Horizontal Stab



No:SKY1065-103 Tempest Spinner



No:SKY1065-104 Tempest Propeller



No:SKY1065-105 Tempest Guided Missile



No:SKY1065-106 Tempest Main Landing Gear



No:SKY1065-107 Tempest Pushrod Set



No:SKY1065-108 Tempest Screws Set



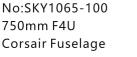
No:SKY5015-014 Skynetic 9g Servo with 350mm (13.7") Lead



No:SKY6000-026 Skynetic Hollow Shaft DST-1200 Motor



750mm F4U Corsair Fuselage





No:SKY1067-103 750mm F4U Corsair Horizontal wings



No:SKY1067-106 750mm F4U Corsair Landing Gear



No:SKY1067-109 750mm F4U Corsair Propeller Hub



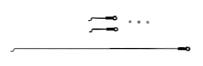
No:SKY1067-111 750mm F4U Corsair 9g servo with 300mm Wire



No:SKY1067-101 750mm F4U Corsair Main Wings



No:SKY1067-104 4750mm F4U Corsair Guided Missile



No:SKY1067-107 750mm F4U Corsair Pushrod and Linkage Set



No:SKY1067-110 750mm F4U Corsair Spinner



No:SKY1067-110 750mm F4U Corsair DST-1300 Brushless Motor



No:SKY1067-102 750mm F4U **Corsair Vertical Wings** 



No:SKY1067-105 750mm F4U Corsair Auxiliary Oil Tank



No:SKY1067-108 750mm F4U Corsair Propeller Hub



No:SKY5015-012 9g Servo with 150mm (5.9") Lead



SKY6003-015 20A Brushless ESC

# **TROUBLE SHOOTING**

Trouble	Possible Reason	Action
Motor doesn't work, but there are audible tones signalling the number of cells.	The ESC throttle calibration has not set up.	Set up the ESC throttle calibration.
	Poor/loose connection between battery Pack and ESC.	Clean connector terminals or replace connector.
Motor doesn' t work and no audible tone emitted.	No power	Replace with a freshly charged battery pack
Servos are not working either.	Poor soldered connections Wrong battery cable polarity	Re-solder the cable connections Check and verify cable polarity
	ESC throttle cable connected to receiver in the reverse polarity	Check the ESC cable connected to the ESC to ensure the connectors are in the correct polarity.
	Faulty ESC.	Replace ESC
	Poor / loose connection between ESC and motor	Clean connector terminals or replace connectors
Motor doesn' t work and no audible	Burnt motor coils	Replace motor
tone emitted BUT servos are working.	Poor soldered connections.	Re-solder the cable connections
Motor doesn't work. An alert tone with single beeping tones followed by a short pause (* * * *) is emitted.	The battery pack voltage exceeds the acceptable range.	Replace with a freshly charged battery pack Check battery pack voltage
Motor doesn' t work. An alert tone with continuous beeping tones (****) is emitted.	The throttle stick is not in the lowest position at power up.	Move the throttle stick to the lowest position.
Motor doesn't work,ESC emits two audible tones followed by short beeps (Trouble Shooting).	Reversed throttle channel caused the ESC to enter the programming mode.	Enter the servo reverse menu on your transmitter and reverse the throttle channel, Note: For Futaba radios set the throttle channel to Reverse.
Motor stops running in flight.	Lost throttle signal.	Check proper operation of the radio equipment. Check the placement of the ESC and the Receiver and check the route of the receiver's aerial and ESC cables to ensure there is adequate separation to prevent RF interference. Install a ferrite ring on the ESC's throttle cable.
	Battery Pack voltage has reached the Low Voltage Protection threshold.	Land the model immediately and replace the battery pack.
	Possible bad cable connection.	Check and verify the integrity of the cable connections
	Possible RF Interference at the flying field.	The normal operation of the ESC may be susceptible to surrounding RF interference. Restart the ESC to resume normal operation on the ground to verify recurrence. If the problem persists, test the operation of the ESC at a different flying field.
Motor restarts abnormally ESC Overheats.	Inadequate Ventilation	Relocate the ESC to allow better ventilation.
	Servos drawing too much current and over loading the ESC.	Use servos that are adequately sized for the ESC. The maximum BEC current drawn should be within the BEC limits.
	Over sized motor or prop.	Reduce prop size or resize the motor.