Item No.: F1701







# **Instruction Manual**

- The manual suit for every color scheme of Freewing F9F Panther.
- The manual only choose one color scheme as an example.



# Please read all instructions carefully before assembly and flight!

Thank you for purchasing the F9F Panther. This model is designed for the intermediate to advanced flyer. The model is receiver-ready and includes everything that you need to assemble and fly your F9F Panther, except for the radio transmitter and receiver. Please read the following instructions carefully, assembly is easy and should only take an hour or so.

# **Main Specifications**

Wingspan: 27" (685mm) Fuselage length: 28-3/4" (730mm) Flight weight: 19-1/2 oz. (552g)

64mm EDF

4300KV out-runner brushless motor. 3-cell 11.1V 1600mAh 20C lipo battery

30A ESC

3pcs. 9g Servo

Optional Landing Gear (Sold Separately) w/ steerable nose wheel and servo included

Radio System with minimum 3-channel Transmitter and Receiver

Battery charger capable of charging a 3-cell Lipo battery

All of the above parameters only for the RTF with landing gear, if you purchase another version, you could refer to the above and choose another spareparts.

# Safety Statement

- 1. This is not a toy. It is for experienced modelers only. You are responsible for the safe operation of this model and any damage or harm it may cause.
- 2. Before flying the F9F Panther for the first time please read through the instructions carefully and make sure that your radio equipment is working properly and has been range tested prior to flight.
- 3. Young people under the age of 14 should only be permitted to operate this model under the instruction and supervision of an adult with modeling experience.
- 4. Please keep these instructions for future reference after completing model assembly. They contain information critical to the safe operation of this model.
- If you have any further questions regarding the safe operation of your RC model, please contact your local hobby shop, flying club or Freewing Model Company for professional help and advice.



# Safety Precautions!

#### Please read this section and follow all recommendations!

- 1. Do not fly in strong wind or bad weather.
- 2. Never fly the model in crowded areas where there are lots of people, automobiles on the road or power lines overhead. Do not fly near full-scale airports.
- 3. Make sure that you have enough open area for flying as the model can travel at a high rate of speed and cover a lot of area quickly. Initial flights should be made in an area with a minimum size of a football field.
- 4. This model is not recommended for children under the age of 14.
- 5. When charging the LiPo batteries, always charge them on a non-flammable surface and monitor the charge process. Improper charging of LiPo batteries is dangerous and can lead to a fire!
- 6. The F9F Panther is made from EPO foam and plastic. These materials are flammable and can be damaged by high heat. Never leave your F9F Panther near a heat source or in an automobile.
- 7. Do not attempt to catch your F9F Panther while flying.
- 8. Never leave your F9F Panther unattended when ready for flight.
- 9. When preparing for flight, always turn on your transmitter first and make sure that your throttle is in the off position prior to plugging in the flight battery. Failure to follow this step may lead to unintended motor start and damage to the model.

# Illustration of Assembly

1. Open box and carefully unwrap all parts.





- 2. Apply a small amount of epoxy to one of the horizontal stabilizers.
- 3. Apply a small amount of epoxy to the vertical stabilizer slot for the horizontal stabilizer see Repeat for other side.

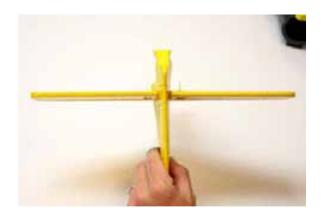
and glue it in place. Repeat for other side.



4. Check that horizontal stabilizers are at 90 degrees to the fin.



5. Apply 5-minute epoxy to the root of one wing panel.



6. Apply 5-minute epoxy to the wing tabs on the fuselage.



7. Attach and hold the wing in place until the epoxy cures. Repeat for other wing.

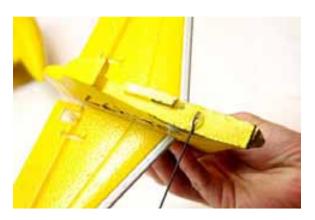




8. Insert the aileron servo wires into the holes in the fuselage and route to Rx.



9. Apply 5-minute epoxy to the bottom of the vertical stabilizer with the foam insert on the right side removed.



10. Carefully install the vertical stabilizer onto the fuselage, making sure the elevator tube goes into the exit slot. Be sure not to foul the pushrod opening with glue.





11. Epoxy the area where the foam insert goes and carefully install the insert while making sure the elevator tube goes into the exit slot.





12. Slide the elevator pushrods through the tubes and attach the plastic clevises. Center the elevator servo and while holding the elevators in the neutral position, tighten the connector screw on the servo horn with a screwdriver.





13. Apply 5-minute epoxy to the nose cone and attach it to the fuselage, making sure it is aligned properly.





14. The hatch has magnets at the front and a tab at the back. Lift from the front and slide forward to remove the hatch. Install your receiver using double sided tape or Velcro.





15. If not installing the optional landing gear (sold separately), glue the front plastic nose cover on with contact adhesive or 5-minute epoxy.





16. Installing the optional landing gear (sold separately). Remove the plastic covers on the wings. Use 5-minute epoxy to install the plastic landing gear base. Next, feed the steering servo wire into the nose and glue the nose gear base in place. Connect the nose wheel steering lead to the rudder channel on your receiver.









17. Install the battery pack in the nose and position to achieve proper center of gravity.





18. Aileron control throws are 3/8" Up and Down on Low Rates. They are 1/2" Up and Down on High Rates.





19. Elevator control throws are 3/16" Up and Down on Low Rates. They are 5/16" Up and Down on High Rates.





20. The Center of Gravity for the F9F Panther is 1-3/4" (45mm) back from the leading edge

of the wing where it meets the fuselage. Adjust the position of the battery to achieve correct balance. Never attempt to fly a model that is not correctly balanced.



# Preparation before flight

- 21. Set throttle to the lowest position and set transmitter trims to neutral.
- 22. Turn on the transmitter
- 23. Connect the flight battery to the ESC. After ESC initializes check that the correct channel is controlling each control surface and that they are traveling in the correct direction when commanded. Example: right stick moved to the right and the aileron on the right wing moves upward while the aileron on the left wing moves downward.
- 24. Adjust each control surface to its neutral position by mechanically adjusting each clevis.

#### Recommended control throws for F9F Panther

#### **Elevator**

Low Rates 3/16" Up and Down High Rates 5/16" Up and Down

#### Aileron

Low Rates 3/8" Up and Down High Rates 1/2" Up and Down

After initial flights adjust the control throws to best suit your flying style and ability.



### Check before flight

- 1. Make sure that your transmitter is fully charged. Conduct a range test of your radio system per the manufacturer's specs.
- 2. Check all flying surfaces for correct direction of movement, correct amount of movement and for correct centering, adjust as required.
- 3. Fully charge your flight batteries prior to flying.
- 4. Hand launch into the wind and land into the wind.

## Flight Adjustment

- 1. On initial flight climb to about 75-100 feet and see if any trim is required. If the model rolls to the right, apply some left aileron trim to level the wings. If the model dives, apply some up elevator trim, ect.
- 2. Landing should be made into the wind, reduce the throttle to just above idle and keep the nose level or a little high allowing the airplane to sink toward the ground. Apply a little throttle as the model reaches an altitude of a foot or so, this will slow the descent and aid in the flare to a smooth landing.

# Spare parts for F9F



F9F landing gear Item No.: F170106



64mm EDF Item No.: F90210



2627-4300kv Brushless Motor Item No.: F90131



F9F Fuselage Item No.: F170104

F9F Panther

Item No.:F1701



F9F Tail Wing Set Item No.: F170102



F9F Main wing Set Item No.: F170103

Freewing Model

www.sz-freewing.com



# Have Fun! We hope that you have many pleasant flights with your F9F Panther



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