H-KING

FLYCAT

1042mm PARKJET with pre-installed 70mm fan, motor, ESC and servos

MANUAL CONTENTS

The brief was to design a low cost 70mm Parkjet to replace the popular Flycat, it was to have no frills, look similar and to have no landing gear. The result is a similar outline to the original Flycat but it is bigger 1042mm as opposed to 640mm and it has an internal 70mm fan unit rather than an EDF unit sitting on top. With the addition of fan inlet ducts and all round streamlining and updated color scheme the new Flycat looks stunning and it flies as good as it looks.

This version of the Flycat is PNF and comes with a 12 blade 70mm fan unit, high power 3040/2000Kv brushless motor, 80amp ESC with BEC and 3 9g metal geared servos. All these items are pre-installed at the factory as are the colorful decals so time from starting the build to having it ready to fly is minimal. All you will require is a 4ch or greater transmitter and receiver and a 6S 30~60C 4000mah lipoly battery with suitable charger.

Specs:
Wingspan: ***1042mm***
Fuselage Length: ***1115mm***
EDF: ***70mm 12 blade unit***
Motor: ***3040/2000Kv brushless***
ESC: ***80amp with BEC***
Servos: ***3 x 9g metal geared***
Battery: ***6S 30~60C 3000mah lipoly (not supplied)***
Radio: ***4 channels or more (not supplied)***

Option: ***A set of electric retracts can be installed in the Flycat, there are removable panels to allow for the fitting of these. Please see notes at the end of the manual.***

Warning on the use of lipoly batteries and their chargers.

WARNING! FIRE HAZARD!

NEVER USE CHARGER UNSUPERVISED!

- Batteries pose a SEVERE risk of fire if not properly handled.
- Read Entire operation manual before using charger.
- This unit may emit heat during use.
- Only operate this device in a cool ventilated area away from flammable objects.
- Failure to observe safety procedures may cause damages to property or injury.

Warnings and Safety notes

- Keep the charger away from children and pets at all times.
- Never leave the charger unsupervised when charging or discharging. If you leave, disconnect the battery to prevent any unexpected dangers or damage.
- Ensure the charger program and settings match the battery pack otherwise the battery will be damaged and a dangerious situation may arise, especially for Lithium batteries, which may cause a fire.
- Do not mix batteries of different types, different capacities or from different manufacturers.
- Do not disassemble the charger.
- Do not place the charger or any battery on flammable surface or near a combustible material while in use.
- Do not Charge or discharge on a carpet, cluttered workbench, paper,plastic,vinyl, leather or wood, inside an R/C model or inside a full sized automobile.
- Never block the air intake holes and never use in a refrigerated or high temperature environment. If used in such an environment, the internal temperature protection may result in abnormal charging/discharging that could be dangerous.
- Do not allow water, moisture, metal wires or other conductive material into the charger. Never charge or discharge any battery having evidence of leaking, expansion/swelling. Damaged outer cover or case, color-change or distortion.
- Do not try to charge "non-rechargeable" dry cells.
- Do not exceed the bettery manufacturer's suggested maximum charge rates
- Carefully follow the battery pack manufacturer's recommendations and safety advice.

SAFETY INSTRUCTIONS

1. Please read this manual carefully and follow the instructions before you use this product.
2. This airplane is not a toy, due to it's advanced flying qualities it is only suitable for pilots with intermediate or higher experience. If you are a novice then please only operate with the assistance of an experienced pilot.
3. Not recommended for children under 14 years old.
4. Please set up this plane according to the instructions and make sure you keep your hands and other parts of your body out of the way of the rotating propellers at all times. Failure to do so will result in damage to yourself and to the airplane.
5. Do not fly in thunderstorms, strong winds or wet weather.
6. Never fly R/C planes where there are overhead power lines, automobiles, airports, railway lines or near a highway.
7. Never fly R/C planes where there are crowds of people or over organised games. This airplane requires a very flat landing and take-off area or lake that is clear of tree's and other obstacles. Remember safety is the responsibility of the pilot.
8. Do not attempt to catch the plane when you are flying it.
9. The operator will bear the full responsibility of flying and the proper operation and usage of this model. We at Hobbyking will not be responsible for any liability or loss due to improper use of this model.

FLYCAT Kit Components

1. *Fuselage*
2. *Wings*
3. *Tail Booms*
4. *Tailplane*
5. *Fin Servo Connector Cover*
6. *Wing Retaining Parts and Screws*

General Assembly

1. Using slow cure CA or a similar glue apply the glue to the area of the fuselage where one of the plywood wing retaining tongues is located.

2. Glue into place the plywood tongue as shown.

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3. Repeat this process with the other 3 plywood tongues.

4. Glue into place the 4 foam in fills on top of the plywood tongues.

5. This picture shows all 4 foam in fills in place.

6. Apply some slow setting CA or similar glue into the recess on fuselage side of the tail boom that does not have the cut out in the fin.

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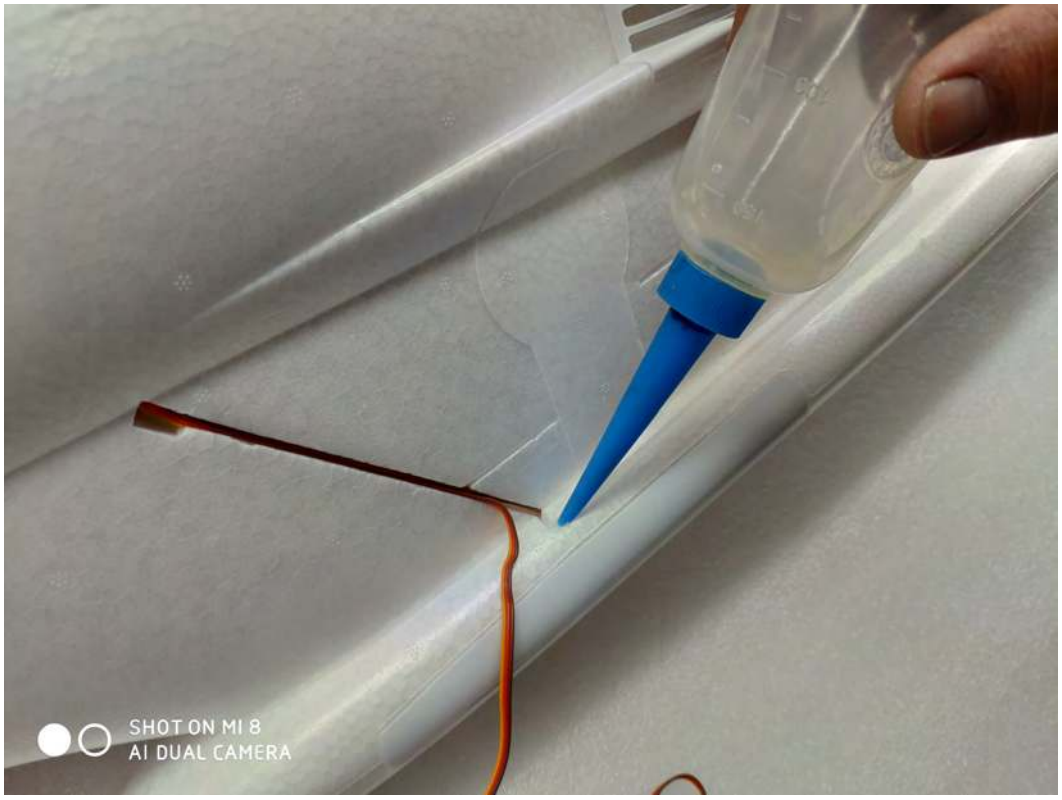
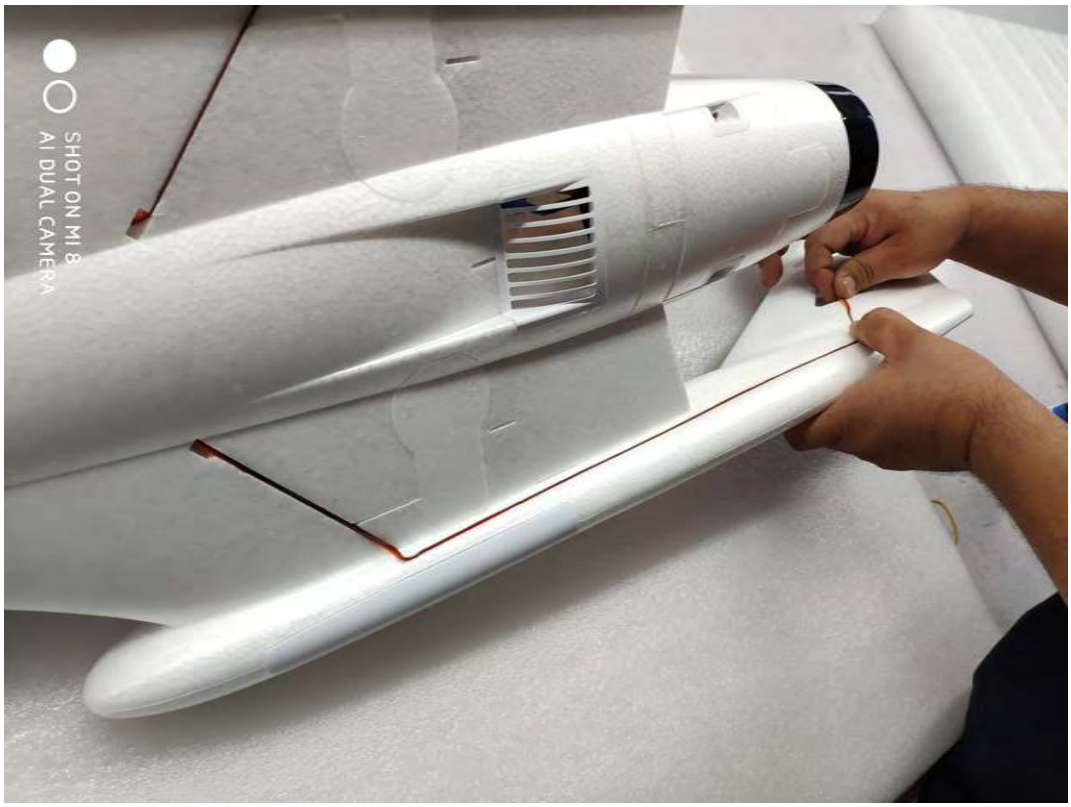
7. Slide the tail boom over the wing root of the fuselage as shown and glue into place.

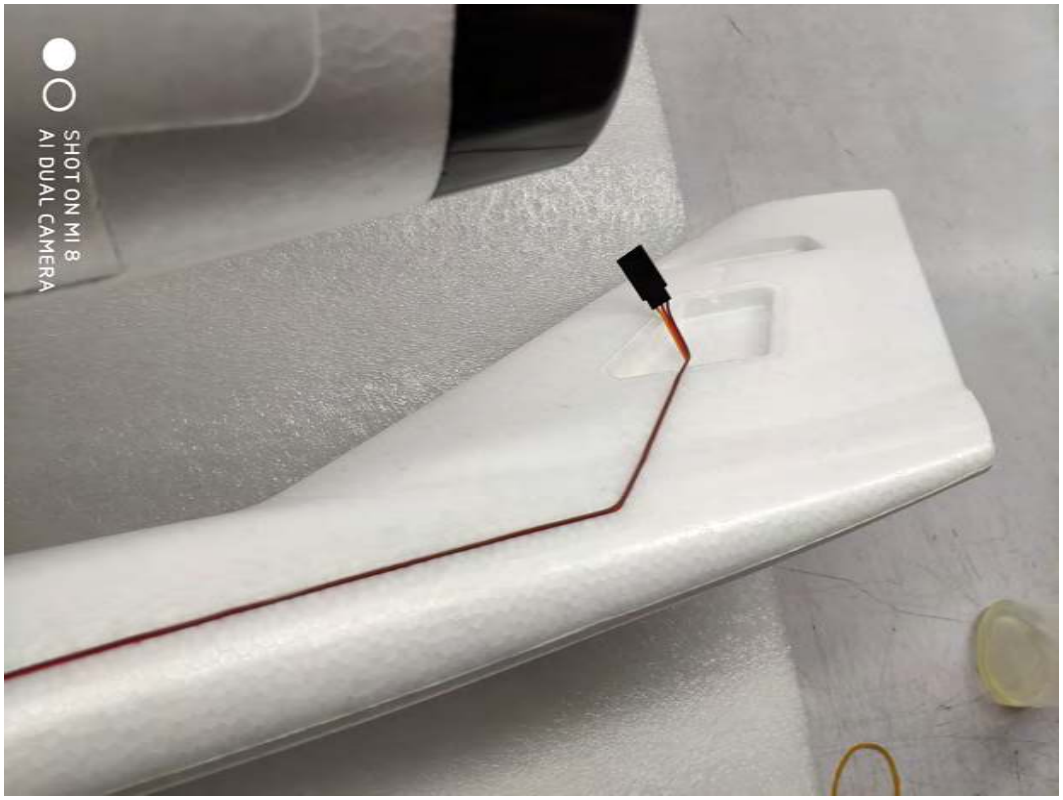
8. Prior to gluing the 2nd tail boom into place ensure you feed the elevator servo extension lead into the cut out slot in the boom (see following pictures).



9. Apply a small amount of glue into the slot in the wing root and press the lead into the slot.



10. Do the same along the boom and up to the cut out in the fin.



10. Ensure the elevator servo extension lead connector is positioned in the area of the cut out in the vertical stabilizer.

11. Apply some slow setting CA or similar glue into the recesses on both vertical stabilizers where the tailplane slots into as shown.

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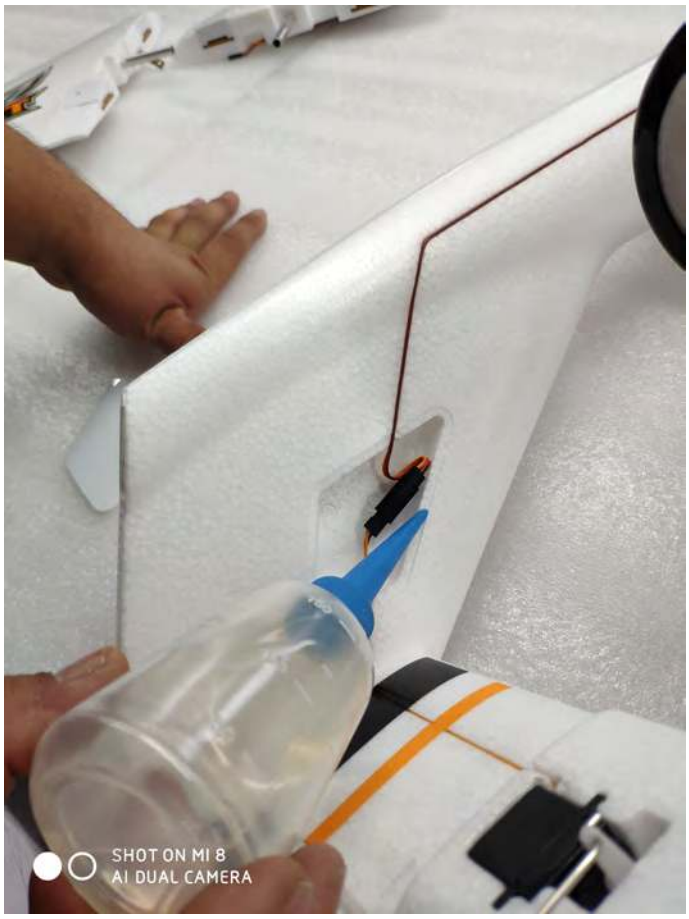
12. Slot the tailplane into position and leave for the glue to set. ensuring the elevator servo lead is positioned correctly as shown below.

13. Connect the elevator servo lead to the elevator extension lead.



14. Apply some glue to the recess in the fin for the servo connector cover.

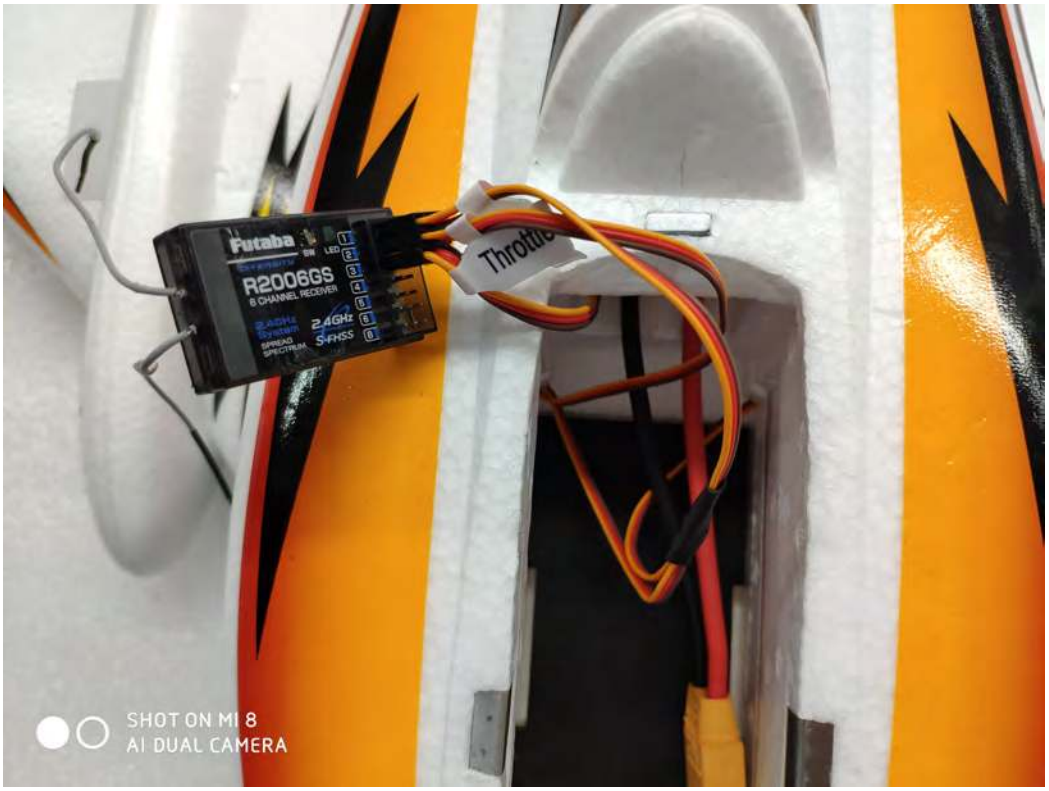
15. Press the servo connector cover into the recess and leave for the glue to set.

16. Connect the aileron servo extension lead from one wing panel to the corresponding connector that exits the wing root in the fuselage/tailboom.

17. Slide the wing tube into the pre-installed tube in the fuselage/tailboom wing root.

18. Slide the wing assembly fully home onto the plywood tongues until the fixing screw holes align (see below picture).

19. Screw the supplied PK screws through the plastic wing fixings and into the plywood tongue. Repate this whole operation with the other wing.

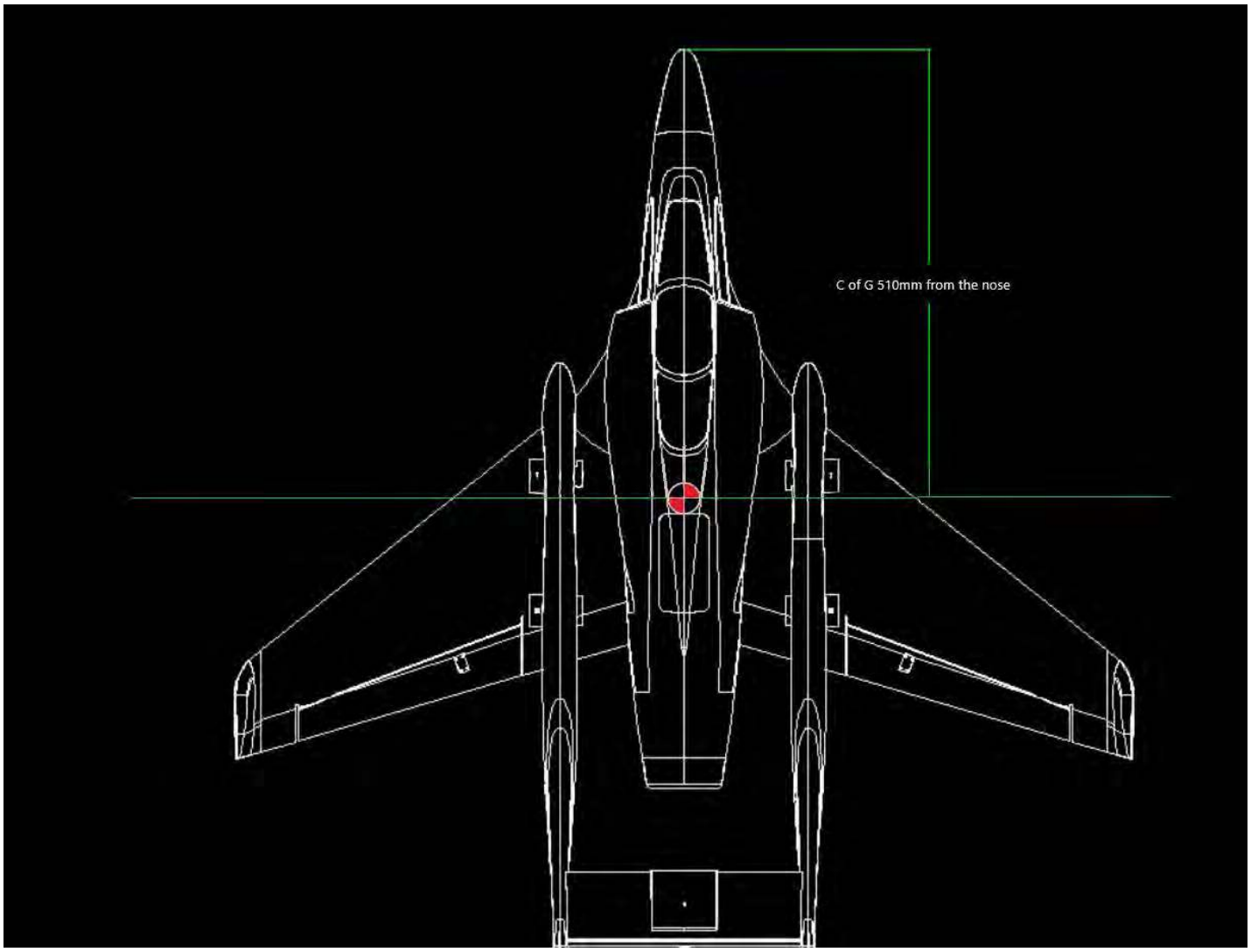


20. Install your chosen receiver and tuck it into the recess at the rear of the battery compartment.

21. Install a 6S 3000mah lipoly battery into the battery compartment

C of G should be 510mm ± 5mm from the nose of the Flycat. As shown this position is in the vicinity of the rear of the front wing fixing.

C of G Position



Adjust the position of the battery to achieve the correct balance

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The following pictures show the recommended set-up.

22. Set the aileron travel to 15mm each way and we recommend you use between 20~30% exponential travel.

23. Set the elevator travel to 30mm each way and we recommend you use between 20~30% exponential travel.

Your FLYCAT should now be ready to fly

Flying Tips.

Before you fly please check your controls and make sure you double check!

Left aileron, the left aileron should go up, right aileron, the right aileron should go up, back stick and the elevator should go up, forward stick the elevator should go down. Double check that the model balances on the C of G correctly, it should balance at the 510mm ± 5mm mark in a slight nose down attitude..

Now you're ready to for your first flight, please make sure you do a range check of your radio equipment first.

The H-King Flycat is a hand launched RC airplane, If you are unsure of hand launching your plane then please find someone who can assist with launch. Hold the model underneath and about head high, facing into wind, check the controls once again then smoothly open the power up to full. Give the model a good level throw and allow the nose to drop just slightly so that the plane builds up speed. Being a ducted fan you do not get the prop wash as you do with a propeller driven plane so you do require airspeed before you initiate a climb.

Once airborne and safely in the climb carry on to a safe altitude to adjust your trim to get the Flycat Flying straight and level on about ¾ throttle. If your plane is not flying correctly land and adjust your radio or the Flycat's linkages where necessary.

Once you have your Flycat flying well it will perform as if it is on rails, it's fast, smooth and manoeuvrable. You will be able to fly all the usual jet like aerobatics with ease and it looks really great in the sky.

When it comes to landing line up your plane with the landing area (hopefully a flat grassed area) using your elevator to control pitch and speed, throttle to control descent and ailerons to keep the wings level simply glide the Flycat home. As it's name, it's a real pussycat and will float into land very easily due to it's low stalling speed.

Your maiden and the sweating is now over, recharge your batteries and really have fun with the Flycat, your fellow flyers when they see it go will all want one, hope you have fun with this amazing RC plane from H-King.

Recommended Accessories

FrSky Taranis Q X7 Digital Telemetry Radio System 2.4GHz ACCST (White-no plugs)

SKU: 236000106-3

FrSky 2.4GHz ACCST TARANIS X9D PLUS Digital Telemetry Transmitter (Mode 2) (EU)

SKU: 236000062-0

Turnigy TGY-i6 AFHDS Transmitter and 6CH Receiver (Mode 2)

SKU: 9114000020-0

OrangeRx Tx6i Full Range 2.4GHz DSM2/DSMX compatible 6ch Radio System (Mode 2) International Version

SKU: 9171001328-03

Turnigy 3000mAh 6S 40C Lipo Pack w/XT-60

SKU: 9067000256-0

Turnigy 3000mAh 6S 30C Lipo Pack w/XT-60

SKU: 9067000255-0

ZIPPY Compact 3300mAh 6s 60c Lipo Pack

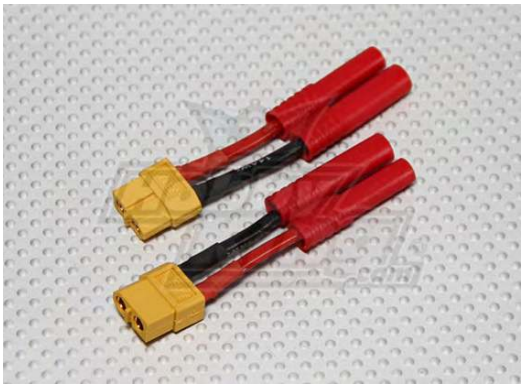
SKU: 9067000040-0

Turnigy Graphene Panther 3000mAh 6S 75C Battery Pack

SKU: 9067000376-0

Turnigy Nano-Tech Plus 3000mAh 6S 70C Lipo Pack w/XT90

SKU: 9210000266-0



HXT 4mm to XT-60 Battery Adapter (2pcs/bag)

SKU: XT60-HXT4MM

Turnigy Reaktor 250W 10A 1-6S Balance Charger

SKU: 9466000004-0

Turnigy Accucel-6 80W 10A Balancer/ Charger LiHV Capable

SKU: 9052000071-0

Turnigy P403 LiPoly / LiFe AC/DC Battery Charger

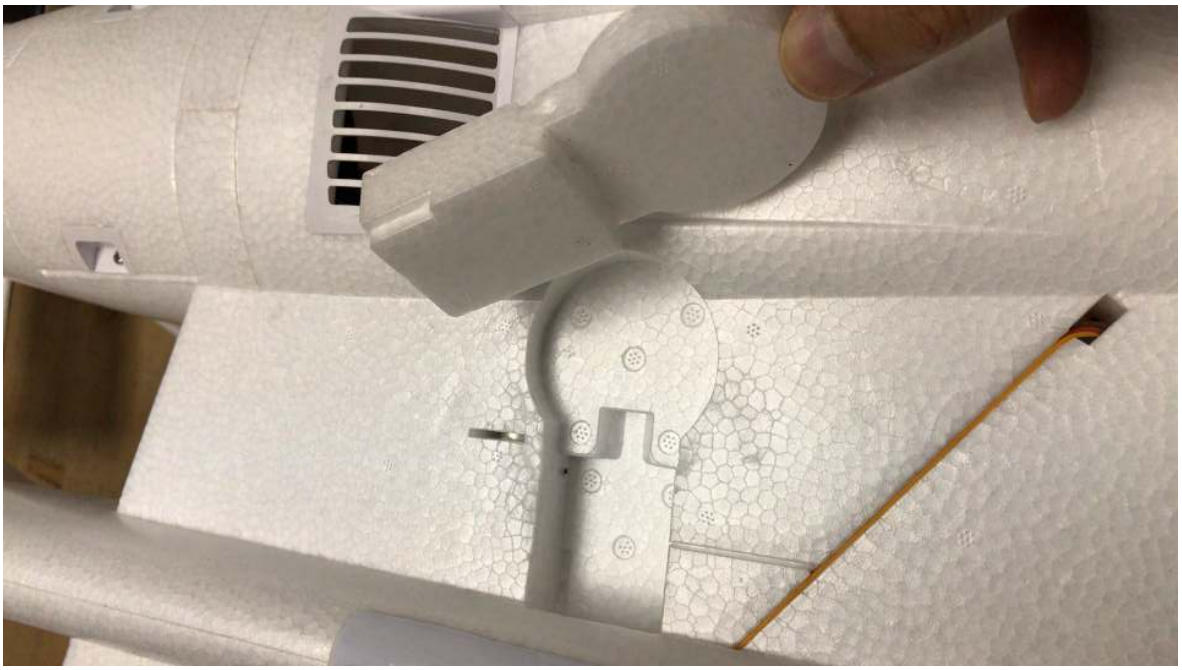
SKU: 9070000039-1 (EU Plug)
SKU: 9070000039-2 (UK Plug)
SKU: 9070000039-3 (US Plug)
SKU: 9070000039-4 (AU Plug)

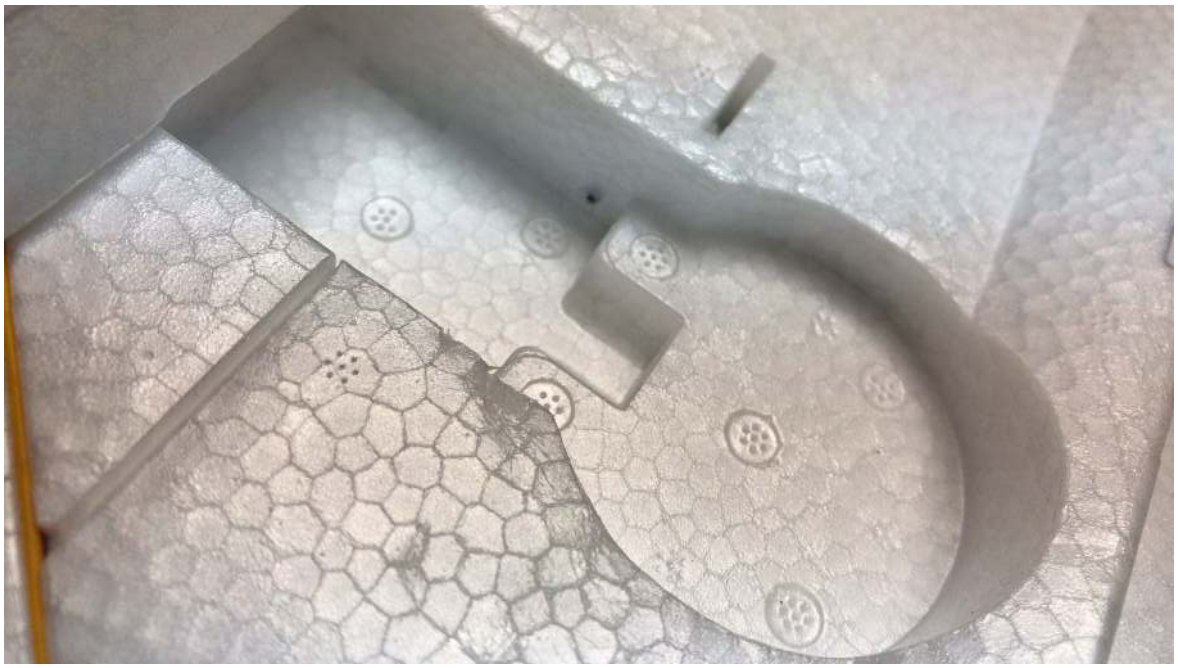
Turnigy Reaktor 120 DUO 2x120W (240W) Balance Charger AC/DC

SKU: 9910000003-1 (EU Plug)
SKU: 9910000003-2 (UK Plug)
SKU: 9910000003-3 (US Plug)
SKU: 9910000003-4 (AU Plug)

Option for fitting retracts.

As shown in the following pictures the foam has been pre-cut to allow for the installation of retracts. There is not a bespoke set of retracts made for the Flycat. They is a good selection on HobbyKing.Com or you may even have a set in your workshop from a redundant model.





If you do not intend to fit retracts to start with then we recommend you tack glue the foam blanking parts into the model. This is so they can be easily removed at a later date if you wish.

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MADE IN CHINA