F3B HORNET

ASSEMBLY & OPERATING MANUAL

RACE TIME!

J Perkins Distribution
www.jpekins.com

FUN WITH A CAPITAL 'F'

Welcome, and congratulations on purchasing an F38 Hornet, an eye-catching, performance delta that has the ability to provide maximum excitement for minimal outlay and preparation time. Equipped with a powerful pre-fitted 1200KV brushless motor, 30A ESC and capable twin 9g servos, a few simple steps is all it takes to get this futuristic 3-channel PNP racer punching 3S-fuelled holes in the sky. Docile, dead easy to launch and furiously fast the JP F38 Hornet is the perfect all-weather grab 'n' go racer. Suitable for any occasion and almost any field it's a model you should fly only if you're a competent (and confident) R/C pilot. It's also a model that deserves to be shared and flown alongside other F38s, whether that be in organised pylon racing heats or just having a crack at the field with your mates. We give you the F38, then. Fun, with a capital F.

SAFETY PRECAUTIONS & WARNINGS

- As the owner and operator of this product you are solely responsible for flying it in a manner that does not endanger yourself and others or result in damage to your F38 or the property of others.
- Always make sure you fly the model with an active fail-safe that's set to cut the throttle in the event of a loss of radio signal.
- Always operate the model in an open area that's well away from cars, traffic or people and that's approved for the flying of model aeroplanes.
- This is not a toy and not suitable for children under the age of 14 or anyone without prior model piloting experience.
- Never fly this model in populated areas.
- Always start a flight with fully charged batteries.
- Always treat the propeller as LIVE when the battery is connected.
- Keep well clear of the propeller when the battery is connected, even if it's stationary. Very serious injury and significant damage can easily occur when live propellers are not respected.
- Carefully follow the directions and warnings for this model and any operational support equipment that you use in combination with it, i.e. chargers, LiPo batteries and radio control equipment.
- Water and moisture is damaging to electronic equipment. Avoid exposure to water and moisture at all times.
- Never operate the model with low transmitter batteries.

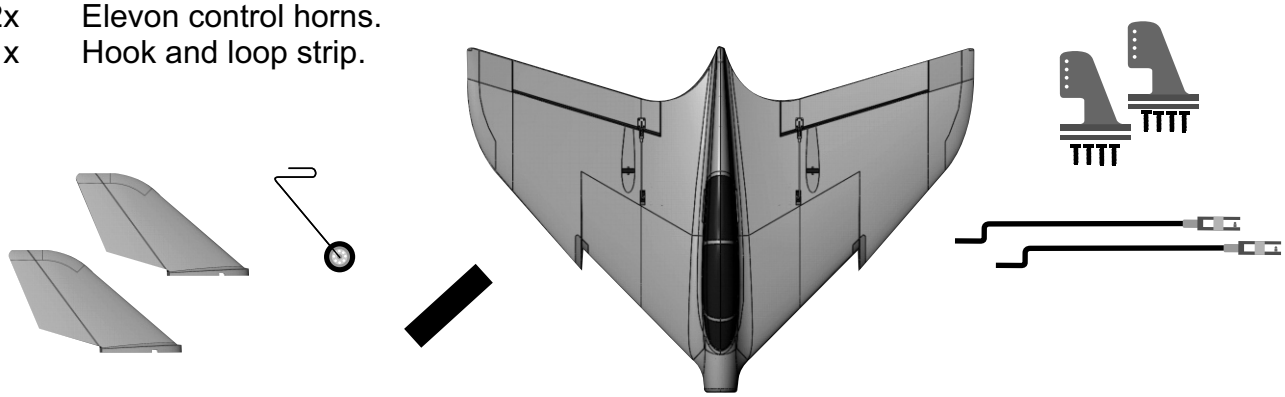
SPECIFICATION

Wingspan:	800mm / 31.5in.
Length:	550mm / 21.7in.
Airframe:	Durable EPO.
Flying weight:	560g / 19.8oz
Total surface area:	24.5dm^2
Motor:	2834-1200KV brushless
ESC:	30A
Propeller:	8 x 6"
Servos:	9g

BOX CONTENTS

Before you start the final assembly of your F38 please check that the following components are present and correct.

1x Airframe with factory installed motor, ESC, and twin 9g servos.
2x Vertical stabilizer fins.
1x Nose landing gear assembly (leg and wheel).
2x Servo pushrod with clevis.
1x Spinner.
1x 8 x 6” tuned propeller.
2x Elevon control horns.
1x Hook and loop strip.



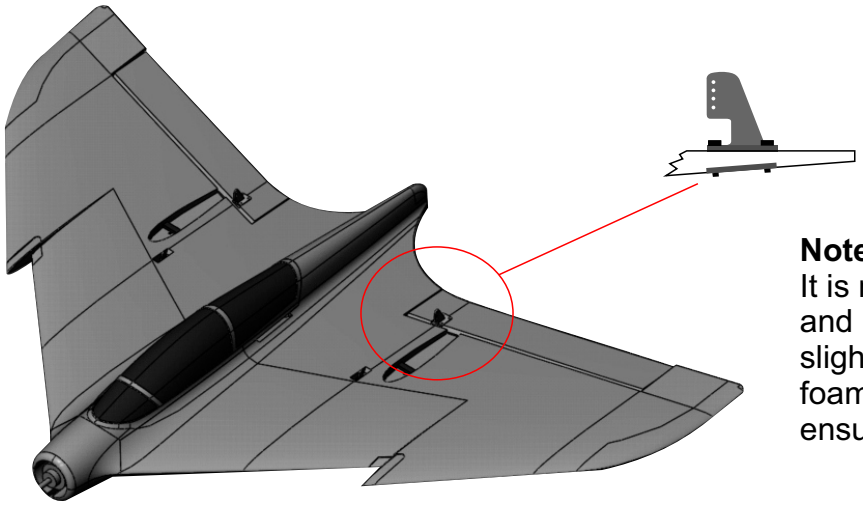
REQUIRED TO COMPLETE

- Foam safe glue.
- 3-channel 2.4GHz transmitter and receiver combo with elevon mixing.
- Radient 2200mAh 30C 3s LiPo with XT60 connector.

ASSEMBLY INSTRUCTIONS

1. Attach the control horns

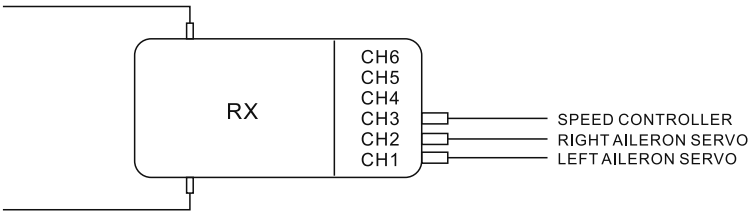
Attach one control horn and backing plate to each control surface using four of the eight control horn screws provided. The position of each horn is identified by a clearly visible indent in the foam. Ensure all the screws pass through the control horn, into the backplate, and that the horn is firmly secured and displays no movement. Failure to attach the horns securely could cause them to become loose in high-speed flight, with catastrophic results.



Note:
It is normal for the screws and mounting plates to slightly compress the foam (by 1mm). This ensures a firm fixing.

2. Install the receiver

Select a new model memory on your transmitter and set the appropriate delta / elevon mix. Connect the two servos and the ESC to the receiver as shown in the diagram or, if different, in accordance with the delta / elevon mix channel allocations dictated by your particular radio brand. Install the receiver behind the ESC. Please ensure you run your receiver antenna(s) clear of the ESC to limit any possible RF interference.



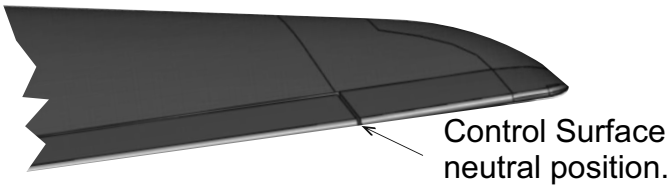
3. Install the battery

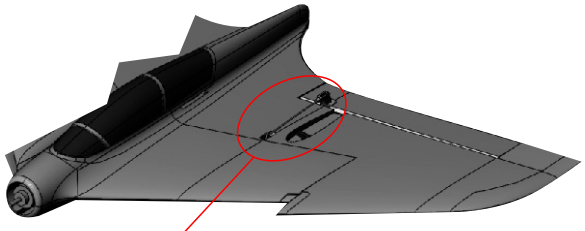
Before connecting the recommended Radient 3S 2200mAh 30C battery (ref. RDNB22003S30XT60) please make sure that the propeller is NOT attached. Connect the battery then allow the the ESC to calibrate and arm, a process confirmed by a series of audible beeps (see note below). Check that the throttle and servos are operating correctly then centre the servos ready for the pushrods to be installed.

Note: The ESC included with this model has a Safe Start facility. If the battery is connected to the ESC and the throttle stick is not set to the low (OFF) position the motor will not start until the throttle stick is moved accordingly. Once the throttle stick is moved to the OFF position the ESC will emit a series of beeps. Several beeps of the same note means that the ESC has detected the cell count of the battery. The beep count will equal the number of cells in the battery (3S battery = 3 beeps). TAKE GREAT CARE. At this point the motor will be armed and will start when the throttle is moved.

4. Attach the pushrods

With the servos set to neutral and the control surfaces set flush with the outboard wing section, as shown in the image below (the inboard end of the control surface will be slightly above the wing section), the control rods can be adjusted to the correct length by screwing the clevis in or out. Note that the clevis must be attached to the control horn NOT the servo. Connect the clevis to the outermost point on the control horn. Two small pieces of tubing are supplied to place over the clevis arms once in position to prevent the arms from opening. As an important safety measure this small detail must be checked before every flight to ensure that the clevis is firmly attached to the control horn.





A — Twist to adjust the pushrod length.

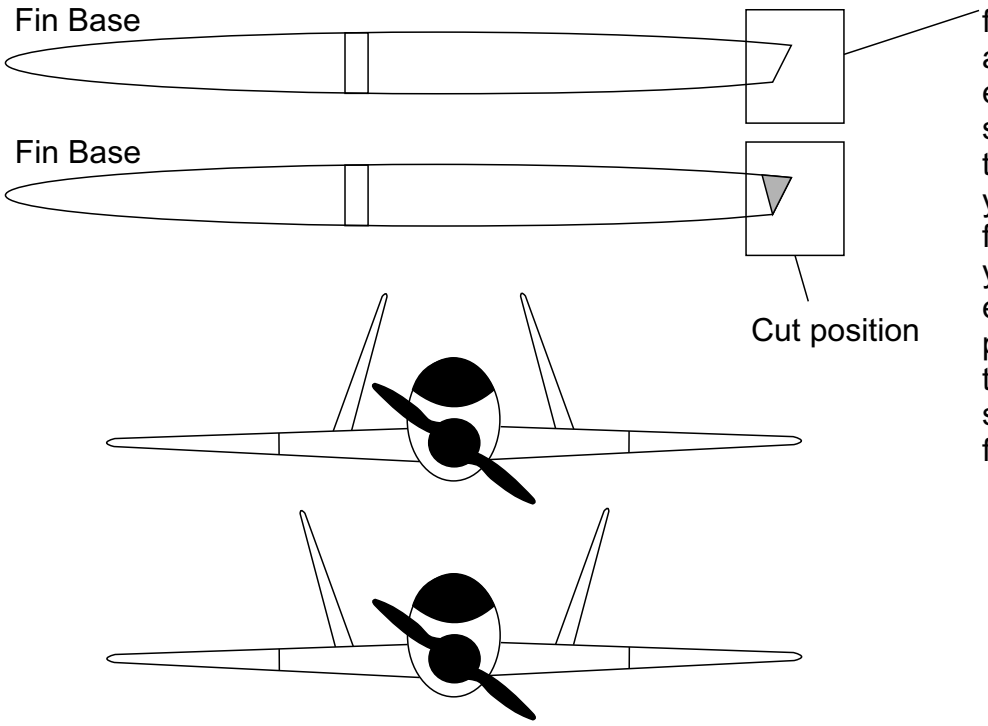
B — Outermost hole.

C — Clevis lock in position.

Note:
Once fitted please check the flight control for full and free movement.

5. Attach the vertical fins

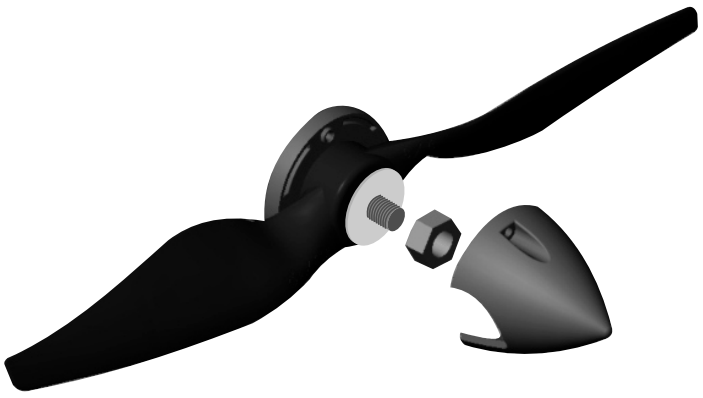
You have two options when attaching the fins. Primarily designed to be fixed in an outward-facing arrangement it is also possible to mount the fins facing inward. The effect of an inward stance is one of appearance and a slightly increased rate of roll. Note, however, that if you choose to angle the fins inward a modification is required to the base of each where it meets the control surface at the trailing edge. Here, you'll need to make a small cut so as to not impede the control surface travel (see below). Having decided on the fin style you want and having made any necessary adjustment, simply glue in place.



Note: The base of each fin incorporates a slight angle at the trailing edge which mirrors the swept leading edge of the control surface. If you choose the inward-facing fin arrangement you'll need to dry fit each, mark the cut position on the base, then trim to fit (as shown) before gluing firmly in place.

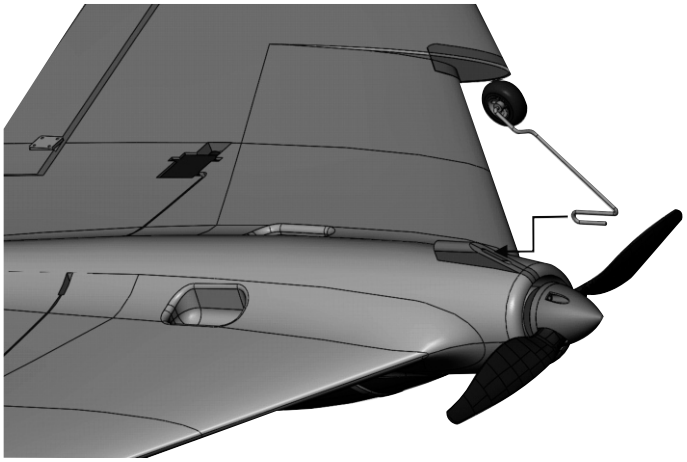
6. Fit the propeller and spinner

Ensure that the LiPo pack is disconnected and removed from the model. Attach the spinner backplate and tuned 8 x 6" propeller to the motor shaft using the supplied washer and nut. Make sure you firmly tighten the nut. Use the two remaining screws to secure the spinner cone.



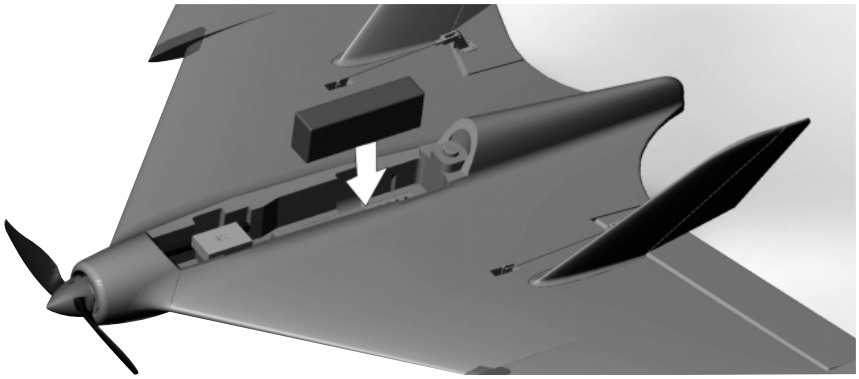
7. Fit the nose leg

The nose leg is optional on your F38 however it can save the propeller on landing. The leg simply pushes into the landing gear support bearer located on the underside nose section of the model.



8. Install your 3S LiPo battery

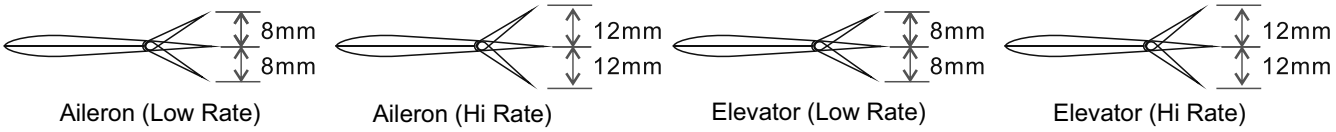
The position for the battery is shown in the illustration below. The space is designed for a Radient 2200mAh 3s 30C LiPo or an alternative of a similar size. Use the supplied hook and loop strap to secure the battery in position. As a belt and braces fix we also recommend using additional self-adhesive hook and loop tape (not supplied) on the plywood base and battery underside.



9. Check the control surfaces

See below for our recommended control surface movements. These are a good starting point, however once you've flown your F38 you may find you want to adjust to suit your flying style.

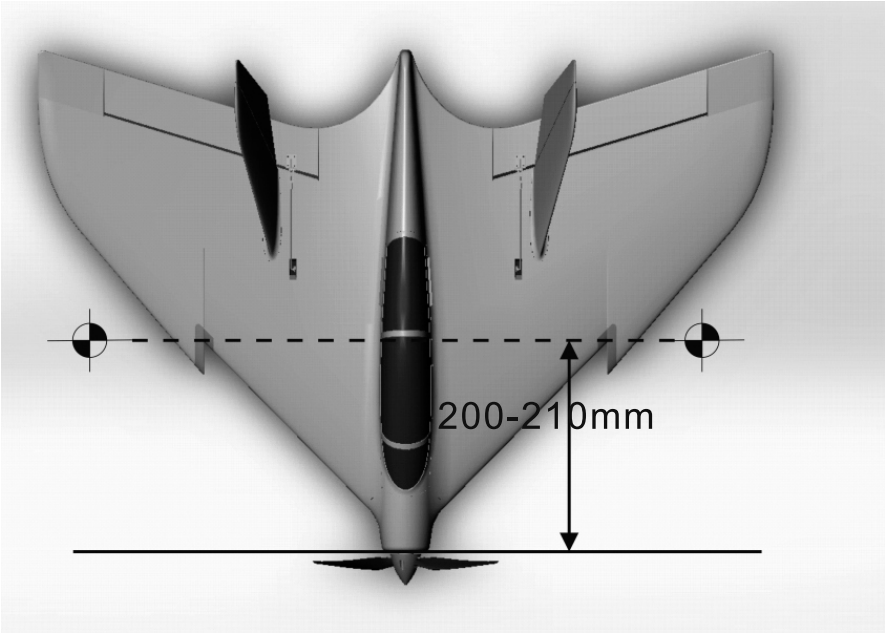
		Low Rate	Hi Rate
Dual Rates	Aileron	8mm	12mm
	Elevator	8mm	12mm



Aileron (Low Rate) Aileron (Hi Rate) Elevator (Low Rate) Elevator (Hi Rate)

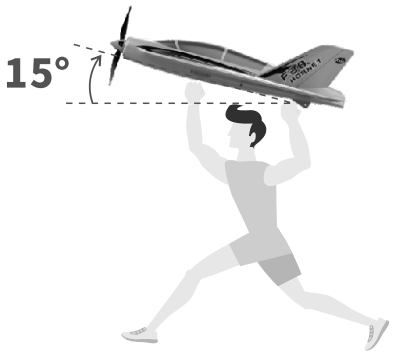
10. Check the Centre of Gravity (balance point)

Use the image below to set the C of G. Do this by moving the battery forward or aft until the correct position has been found. Finally, mark the desired battery position on the inside of the battery bay in order to precisely locate the pack each time you fly.

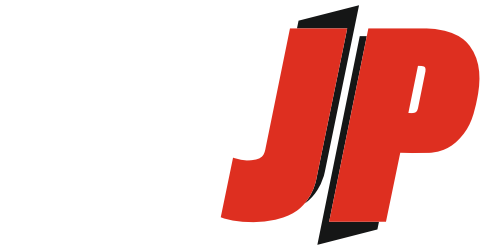


11. Go flying

For your first flight it's always best to get someone with experience to launch your F38, however do note the desired 15° launch angle in the illustration below. Using the finger grips on the underside of the fuselage, launch into wind, with a firm throw and with the throttle set at between three-quarter and full power. Your F38 will leap into the air at which point you can gain altitude, throttle back a little and add trim as necessary; you shouldn't need much.



Once airborne the F38 displays all the characteristic traits of a performance delta, not least a benign stall, comfortable handling and exhilarating speed. With a little stick time this is an aeroplane you'll quickly fall in love with. Take our advice, keep it in the boot of the car, fly it lots and encourage a few friends to buy one in a different colour. One F38 in the air is fabulous. Two, three, four (or more) is simply awesome. Enjoy.



JPerkins.com

Est.

1975