



DURAFLY DH 100 VAMPIRE V3

INSTRUCTION MANUAL



WARNING

Read this instruction manual fully so as to become completely familiar with the features of this product before operating. Failure to operate this product correctly could result in damage to the product, personal property and cause serious injury. This is a sophisticated hobby product and is NOT a toy. It must always be operated with caution, common sense and some basic mechanical ability. This manual provides instructions on the assembly, safe operation and maintenance of this hobby product. It is highly recommended that you read, and follow fully the instructions and warnings stated in this manual. This includes the safety, assembly, set-up, and flying guidelines in order to operate this product correctly to avoid damage or serious injury.

SAFETY PRECAUTIONS

As the user of this product you and you alone are responsible for operating it in a manner that does not endanger yourself and others around you or result in damage to the product or property of others. This product is operated via a radio controlled system that in some cases can be subject to interference from sources outside of your control. Interference may result in a momentary loss of control so it is always recommended that this product be used in a suitably open outdoors space.

- This is a radio controlled flying model and as such must always be flown with caution and care. This is not a toy.
- This model is designed for intermediate to advanced pilots.
- Always exercise great caution when using the recommended battery to power this product. For full safety notes and operating procedures, please see information provided by your battery supplier.
- Take great care when connecting/disconnecting the battery. See battery supplier for full safety procedures.
- Never power up the model in confined spaces and always keep the prop clear of obstructions.
- This product is not a toy. Children must be accompanied by a capable and responsible adult at all times if operating this product.
- Only fly this model in an open area away from crowds of people, buildings, trees, power lines, and other obstructions.
- Always put safety first when operating this model and consider the warnings stated above.
- The supplier/manufacturer accepts no responsibility for damage or injury caused through the use of the product. Not suitable for children under the age of 14. THIS IS NOT A TOY.

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INTRODUCTION

This third version of the DuraFly DH 100 Vampire follows on from its predecessors to deliver a fantastic even better version of this popular EDF jet. We have added many more improvements, so that the best has got even better, these new improvements include:

- **Additional carbon-fiber reinforcements**
- **Simplified and lighter landing gear struts**
- **Improved ducting for greater efficiency**
- **Thrust pipe now included for increased performance**
- **Two color scheme options, RAF Camo/RCAF Silver**
- **Plastic nose cone and gear opening cover for added protection**
- **Plastic retract mount fairings**

The first color scheme is the RAF camouflage version, VX474 was an FB5 model of No 118 Squadron based at RAF Fassberg, Germany, in 1953, the yellow bands on the wings were Squadron markings, not training bands. The second color scheme is the Royal Canadian Air Force (RCAF). This scheme was selected for its history and for orientation when flying. The RCAF obtained their Vampires in late 1948, and being their Air Force's first-ever jet fighter, they were an instant hit with the RCAF aircrew and pilots. The Vampire had an outstanding performance, and graceful lines, this DuraFly version captures this beautifully.

Under the hatch, the Vampire V3 has an AeroStar 60A ESC, an impressive 2836 3300KV brushless motor an efficient 5-blade 70mm fan unit, and 4 high-quality 9g servos. The DuraFly Vampire V3 is made from tough EPO foam and is superbly finished with pre-applied decals. As well as looking the part, it is easy to assemble. The EDF unit, ESC, servos, retracts, and struts are all pre-installed at the factory. Jets are about performance and the DuraFly Vampire V3 will not disappoint. It has a fantastic climb rate due to being even lighter, and has a great turn of speed. When you combine this performance with the uncanny scale-like sound, the result is one of the most realistic jets in this class. It has a wide, stable, flight envelope, fast passes are a dream, so are big loops and rolling maneuvers, and the slow speed handling combines to give you a very forgiving model.



DURAFly DH 100 VAMPIRE V3



SPECIFICATIONS

- Wingspan: 1100mm
- Length: 888mm
- Flying Weight: 1050g
- EDF: 70mm 5-blade
- Motor: 2836-3000KV Brushless Outrunner ESC:
- Aerostar 60A w/UBEC w/reverse Servos: 4 x 9g
- Retracts: 3 x servoless electric
-

REQUIRED

5ch or more transmitter and receiver

1 x 4S (14.8V) 2200~3300mAh LiPo battery 30C minimum

SAFETY PRECAUTIONS

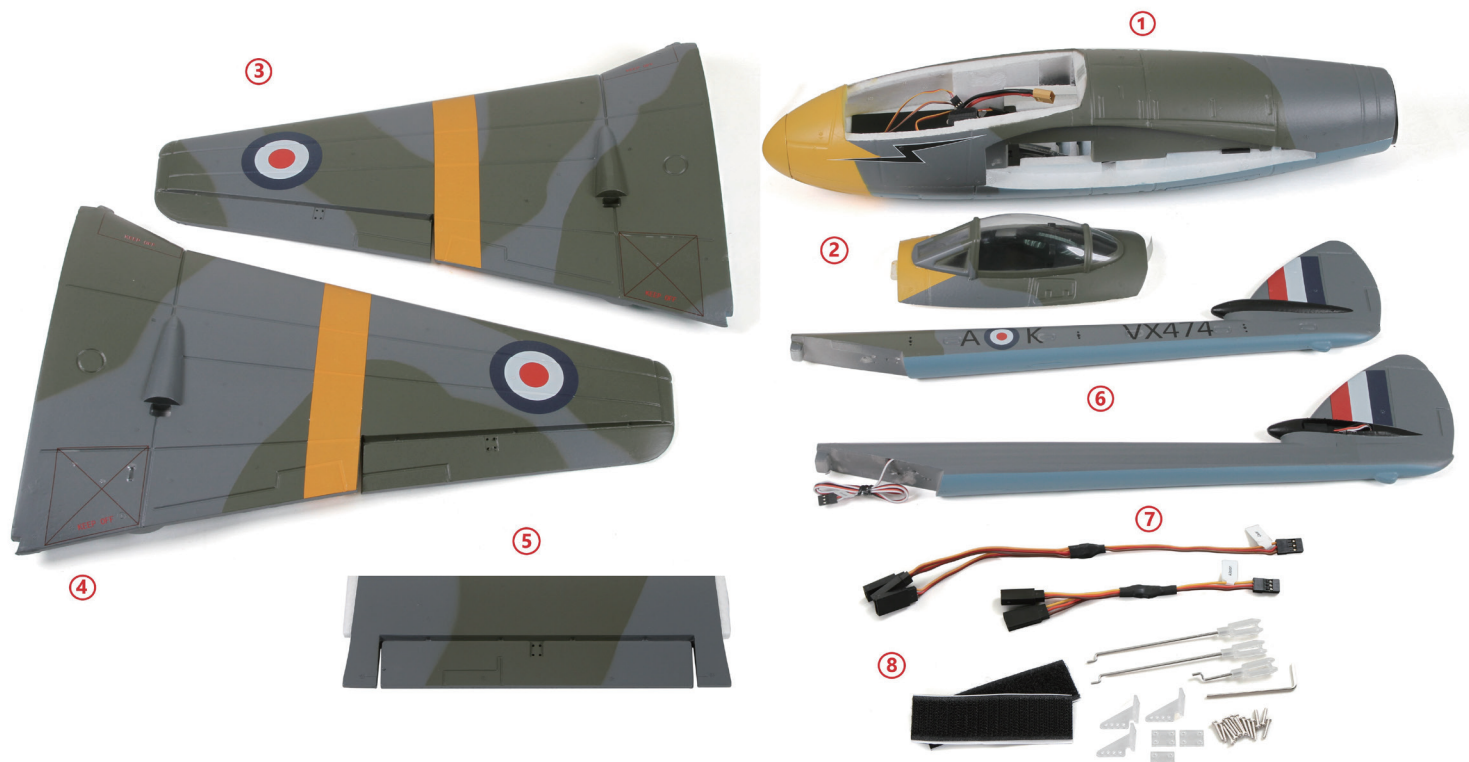
- This is an electric radio controlled model plane and is not a toy.
- This D.H.100 Vampire model is designed for intermediate to advanced pilots. Children younger than 12 years old must be accompanied by an adult when operating this model.
- Only fly this model in an open area and away from crowds of people, buildings, and high voltage power lines.
- Please always put safety first and operate this model as instructed and to heed the warnings as stated in this manual.
- The supplier/manufacturer accepts no responsibility for damage or injury caused by the use of this model.



DURAFLY DH 100 VAMPIRE V3



CONTENTS



- 1. FUSELAGE
- 2. CANOPY/BATTERY HATCH
- 3. LEFT WING
- 4. RIGHT WING

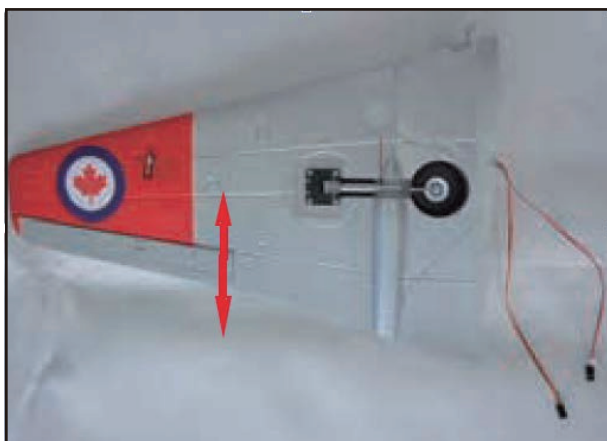
- 5. HORIZONTAL STABILIZER
- 6. TAIL-BOOMS
- 7. SERVO LEADS
- 8. HARDWARE SET



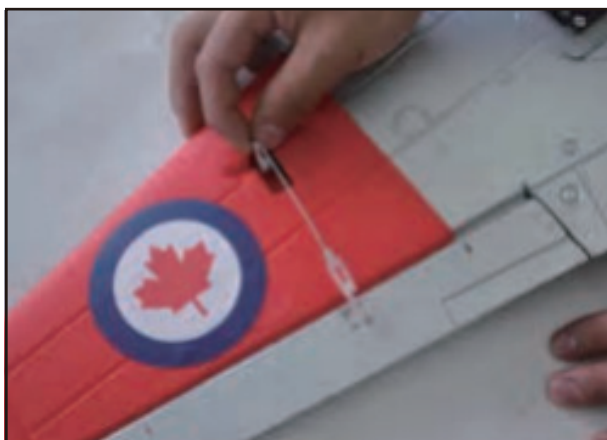


ASSEMBLY INSTRUCTIONS

1. The DuraFly Vampire has EPP foam hinges, these can be quite stiff when new out of the box. Flex the hinge joint a few times before you start assembly until they move quite freely, this will take the load off the servos. It is also a good idea to use a good quality hinge tape such as "Blenderm" on the hinges for security, and durability. Please ensure the tape follows the contours of the hinges to stop any binding.



2. Next step is to fit the control horns to the ailerons using the screws provided as shown, 2 screws to each horn.



3. Connect the right wing aileron pushrod by passing the Z-link end through the top hole in the servo arm, then connect the clevis to the control horn. Please make sure the servo is neutral with the arm at 90° to the servo, then adjust the clevis so that the aileron is also neutral.





4. Repeat this process for the left hand aileron and pushrod.



5. Apply some glue to the wing end of the left hand tail-boom, then glue it into the indent in the top of the left hand wing panel.



Please note: We recommend that you remove the paint from the root end of each wing, and the fuselage wing root apertures before gluing the wings into place.



6. Once the boom to wing joint has cured, ease the aileron servo connector out of the wing panel.



7. Feed the aileron Y-lead connector out of the wing root.

8. Apply some glue to the fuselage wing root aperture as shown. Please make sure you do not use a glue that sets too quickly.

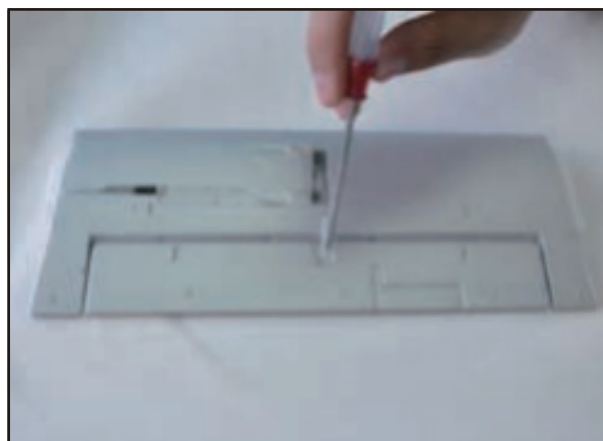


9. Connect the aileron servo lead to the Y-lead then push the wing into the wing root aperture in the fuselage.

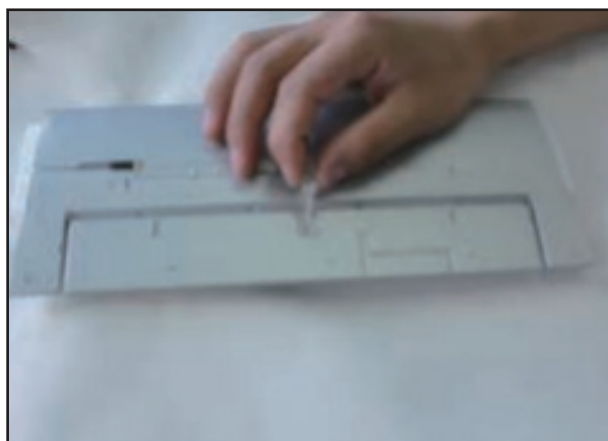
10. Apply glue to the wing end of the right hand tail-boom.



11. Glue the tail-boom into place on the right hand wing.



12. Attach the elevator horn to the elevator using the 2 screws provided.



13. Pass the Z-link end of the elevator pushrod through the top hole in the servo arm, then connect the clevis to the control horn.



14. Attach the elevator servo lead connector to the extension lead that exits the right hand tailboom.



15. Apply some glue to the spigot on the right hand end of the horizontal stabilizer.



16. Glue the right hand end of the horizontal stabilizer to the inside of the right hand tail-boom as shown.

Note: Before moving onto the next step of attaching the right hand wing assembly, make sure you have the aileron servo connectors ready to connect together. Also make sure the elevator servo extension lead is ready to feed through when gluing the wing into position.



17. Allow the glue to dry on the right hand assembly.



18. Apply slow-cure glue to the right hand wing root attachment on the fuselage.



19. Also apply some slow-cure glue to the left hand side of the horizontal stabilizer.



20. Locate the right hand wing root into the right hand side of the fuselage. At the same time locate the left hand side of the horizontal stab into the left hand tail-boom.

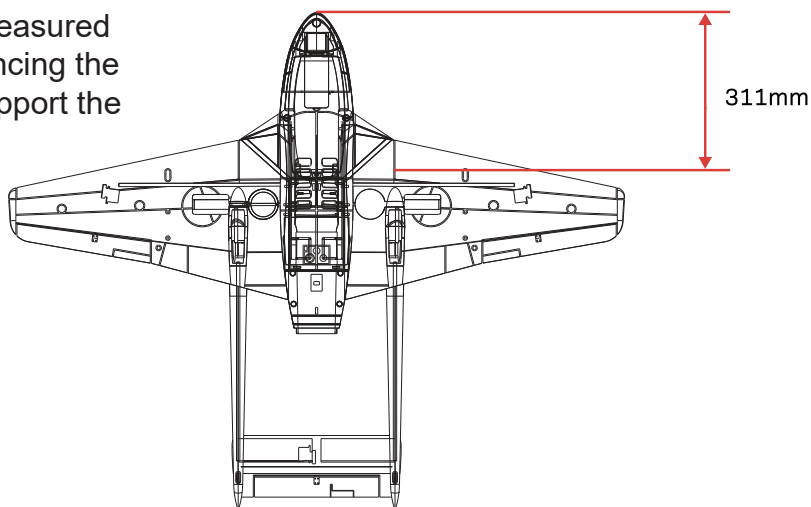


The basic assembly of your DH-100 Vampire V3 is now finished.



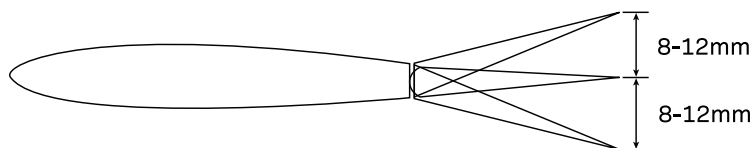
C OF G LOCATION

The recommended CG is 311mm, this is measured from the nose as shown below. When balancing the Vampire, have the wheels retracted and support the plane inverted with your fingers underneath on the top surface of the wing.

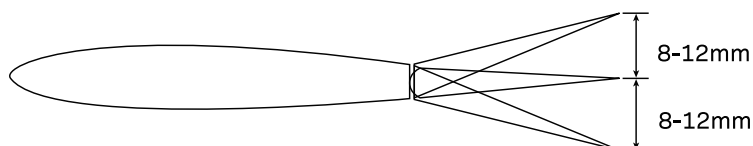


RECOMMENDED CONTROL THROWS

Aileron: low 8mm, high 12mm



Elevator: 8mm low, 12mm high



Nosewheel: 10mm each way





OPERATING THE DH-100 VAMPIRE V3

Aerostar ESC Start-up Procedure

1. Turn on your transmitter and set the throttle to the low/off position.
2. Connect your flight battery to the model.
3. The motor will beep 4 times denoting a 4S has been connected.
4. When the motor emits 2 beeps, the self-test procedure has finished and the ESC is ready to go.

FLYING TIPS

Before you fly please check your controls and make sure you double check! Left aileron stick, the left aileron should go up, right aileron stick, the right aileron should go up, back stick and the elevator should go up, forward stick the elevator should go down. Then rudder left, nose-gear goes left, rudder right, nose-gear goes right. Double check that the model balances on the C of G correctly.

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

Once your radio is powered up and controls checked, line up the DuraFly Vampire into wind on your take-off strip, ideally this should be a smooth hard surface, or a smooth strip with short grass. Being a ducted fan you do not get the prop wash as you do with a propeller driven plane so you will require airspeed before you initiate lift-off and a climb. As you smoothly open the throttle, hold in a small amount of up elevator and keep the model straight using the steerable nose-gear, as this is an EDF you will not get any torque swing as you would with a prop plane. Once sufficient airspeed has been reached the Vampire should lift-off on its own, if not just increase the elevator a bit more until it does. Keep the model straight and climb-out, not too steeply, and allow the speed to increase.

Once airborne and safely in the climb, retract the landing gear and carry on to a safe altitude to adjust your trim to get the Vampire flying straight and level on about $\frac{3}{4}$ throttle. If your plane is not flying correctly land and adjust your radio or the Vampire's linkages where necessary.

DURAFly DH 100 VAMPIRE V3



Once you have your Vampire flying well, and in trim, 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, lower the landing gear and line up your plane with the landing area, then using your elevator to control pitch and speed, throttle to control descent and ailerons to keep the wings level, keep it lined up with your strip, and simply glide the Vampire home. It's a real pussycat and will float into land very easily due to it's benign handling and low stalling speed.

Your maiden and the sweating is now over, recharge your batteries and next time have real fun with the DuraFly Vampire V3, your fellow flyers when they see it go will all want one, hope you have fun with this amazing RC plane from DuraFly.





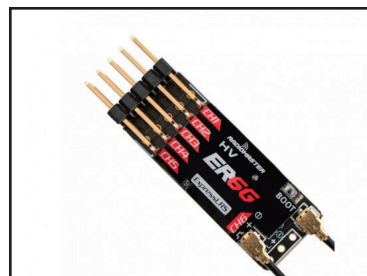
RECOMMENDED ACCESSORIES



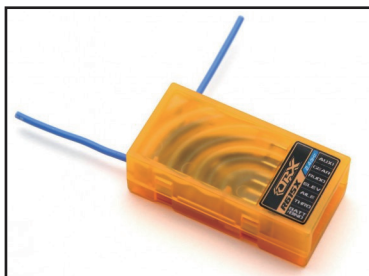
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EdgeTX Firmware
SKU: 1022720001



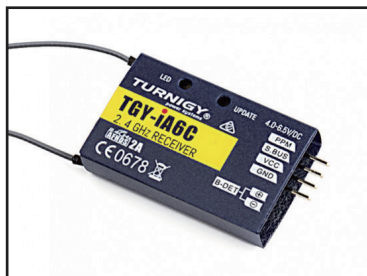
Turnigy TGY-i6 AFHDS
Transmitter & 6CH Receiver
SKU: 9114000020-0



RADIOMASTER ER6G 6ch ELRS
PWM Receiver w/Dual Antenna
SKU: 1022720043



OrangeRx R615X DSM2/DSMX
Compatible 6Ch Receiver
SKU: 9101800001-0



Turnigy iA6C PPM/SBUS 8CH
AFHDS 2A Telemetry Receiver
SKU: 9114000063-0



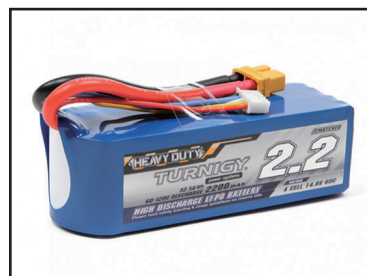
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Balance AC/DC Charger AC/DC
SKU: 9466000018-2



HOTA H6 Pro AC/DC 1~6S
Smart Charger
SKU: 9466000020-2



Turnigy Quad 4x6S Lithium
Polymer Charger DC Only
SKU: 9070000060-0



Turnigy Heavy Duty 2200mAh
4S 60C LiPo w/XT60
SKU: 9067000194-0



Turnigy 2200mAh 4S 40C
LiPo Pack
SKU: T2200.4S.40



ZIPPY Compact 2700mAh 4S 60C
LiPo Pack
SKU: 9067000034-0



Turnigy 3000mAh 4S 40C LiPo
Pack w/XT-60
SKU: 9067000253-0



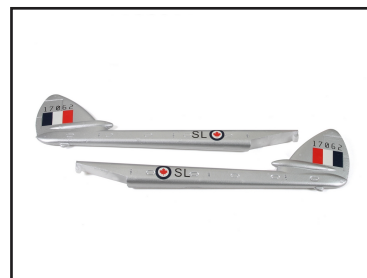
SPARE PARTS



Canopy & Battery Hatch (RCAF)
SKU: 9306790701



Wing Set w/Ailerons (RCAF)
SKU: 9306790702



Tailbooms L & R (RCAF)
SKU: 9306790703



Horizontal Stabilizer (RCAF)
SKU: 9306790704



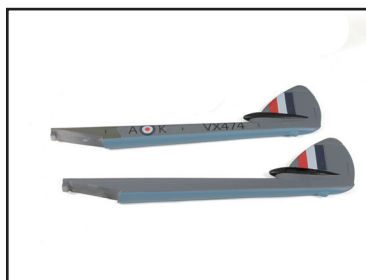
Fuselage (RCAF)
SKU: 9306790705



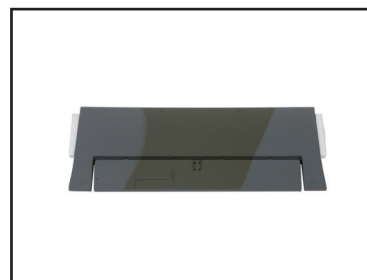
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SKU:



Tailbooms L & R (Camo)
SKU:



Horizontal Stabilizer (Camo)
SKU:



Fuselage (Camo)
SKU:



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