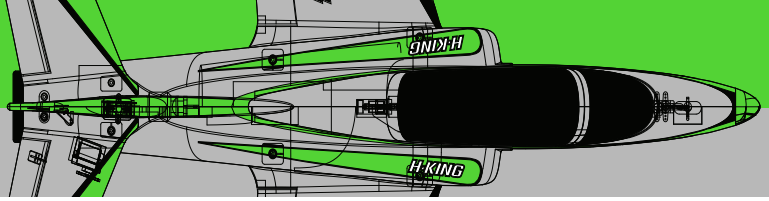
Viper 64

INSTRUCTION MANUAL

H·KING

Please read this manual carefully before operating this plane.

CONTENTS



INTRODUCTION

The H-King Viper 64 is a fast, aerobatic EDF jet that matches stunning looks with a great performance. The EPO airframe combines strength with lightweight, meaning the powerful 2840-2600KV brushless motor, 64mm 12- blade EDF unit, and a 6S battery gives the Viper 64 an incredible performance for impressive jet style flying. At the other end of the scale the low speed handling is equally impressive, this is courtsey of the included flaps and stylish winglets which provide lift right down to very slow speeds. There is nothing better than seeing a jet performing a slow, perfectly controlled high alpha landing.

This "Plug N Fly" version of the Viper 64 comes complete with the 64mm 12-blade fan unit, 2840-2600KV brushless motor, 60A ESC, and 8 x 9g servos pre-installed at the factory.

SPECIFICATIONS

- Wingspan: **1000mm**
- Fuselage **Length: 910mm**
- EDF: **64mm 12 blade unit**
- Flying Weight: **1150g**
- Motor: **2840-2600KV brushless**
- ESC: **60amp with BEC**
- Servos: **8 x 9g high speed**
- Battery: **2 x 2200mAh 3S LiPo Packs 25C + in Series**
  or
  1 x 2650mAh 6S LiPo Pack 45C +
  or
  1 x 3000mAh 6S LiPo Pack 30C +
  Please note that the batteries are not supplied.
- Radio: **5 channels or more (not supplied)**
- All Up Weight: **1320g**

Warning on the use of lipo batteries and their chargers.

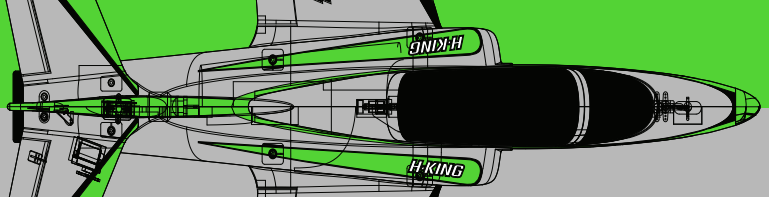
WARNING! FIRE HAZARD!

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 parts and the fan intake holes 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 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.

VIPER 64 KIT COMPONENTS

1.

2.

3.

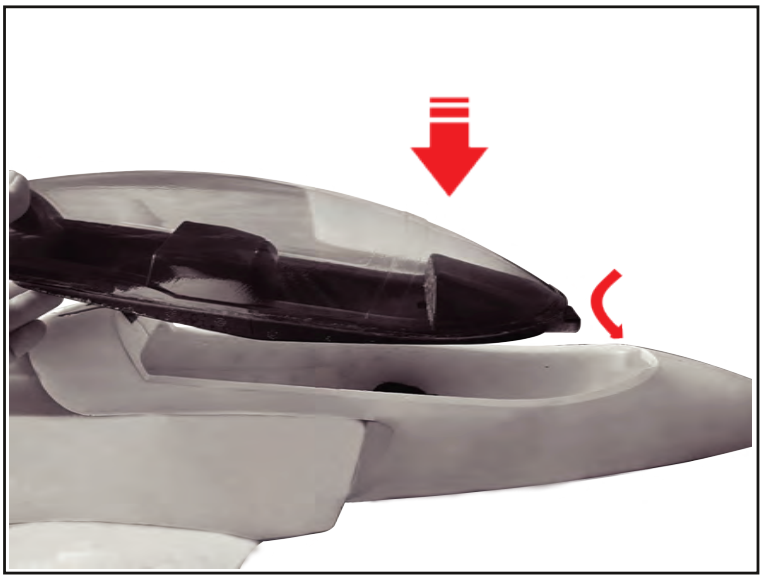
4.

5.

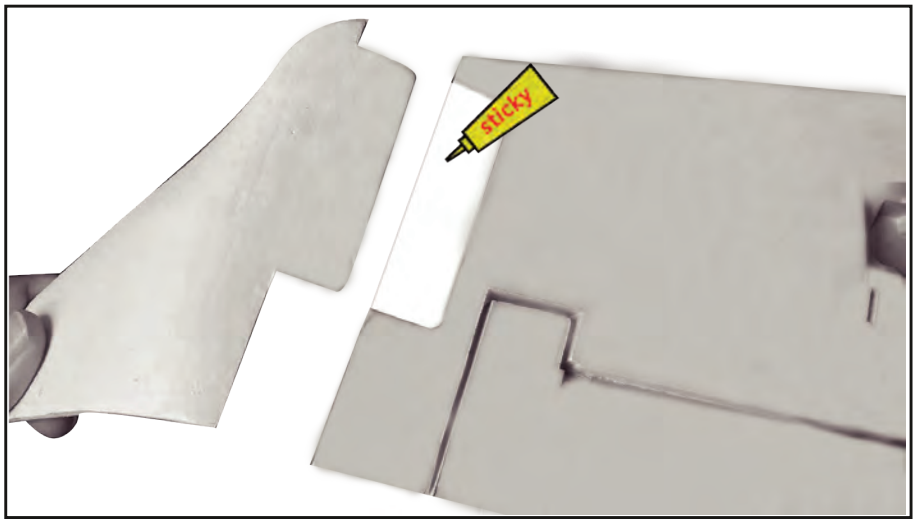
6.

1. *Fuselage*
2. *Horizontal Stabilizer*
3. *Main Wing*
4. *Winglets*
5. *Canopy and Hatch Cover*
6. *Landing Gear*

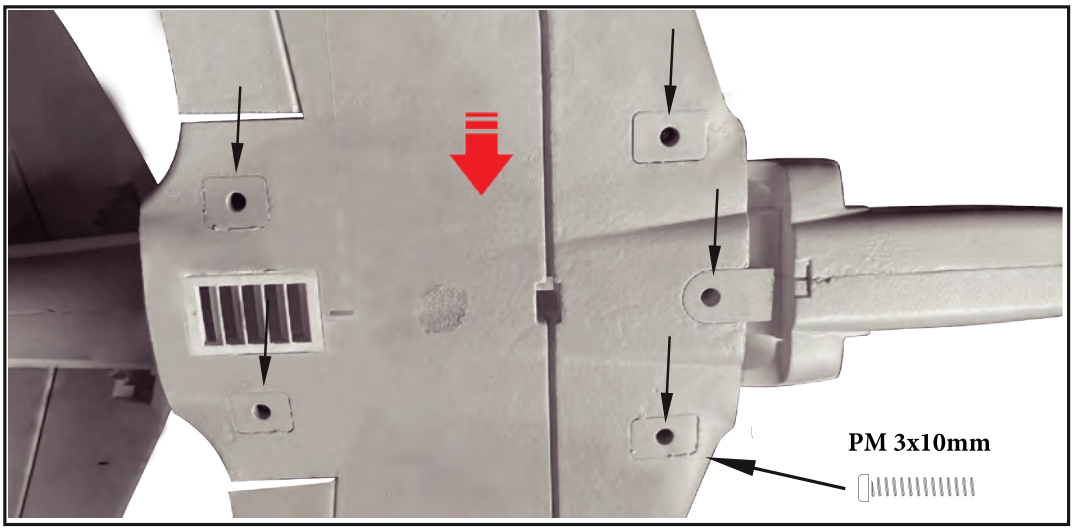
GENERAL ASSEMBLY



1. *Install the canopy by locating the tongue at the front into the fuselage as shown, then push the rear down to make contact with the magnetic catch.*



2. *Glue the winglets into place onto each wing tip.*



3. *Attach the wing using the 5 PM 3x10mm screws provided.*

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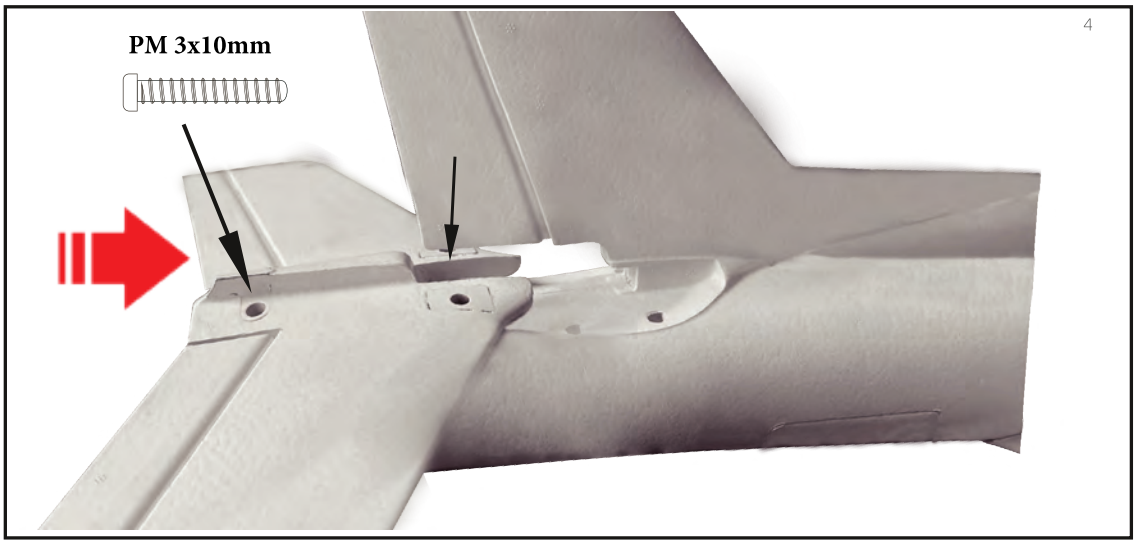
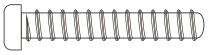
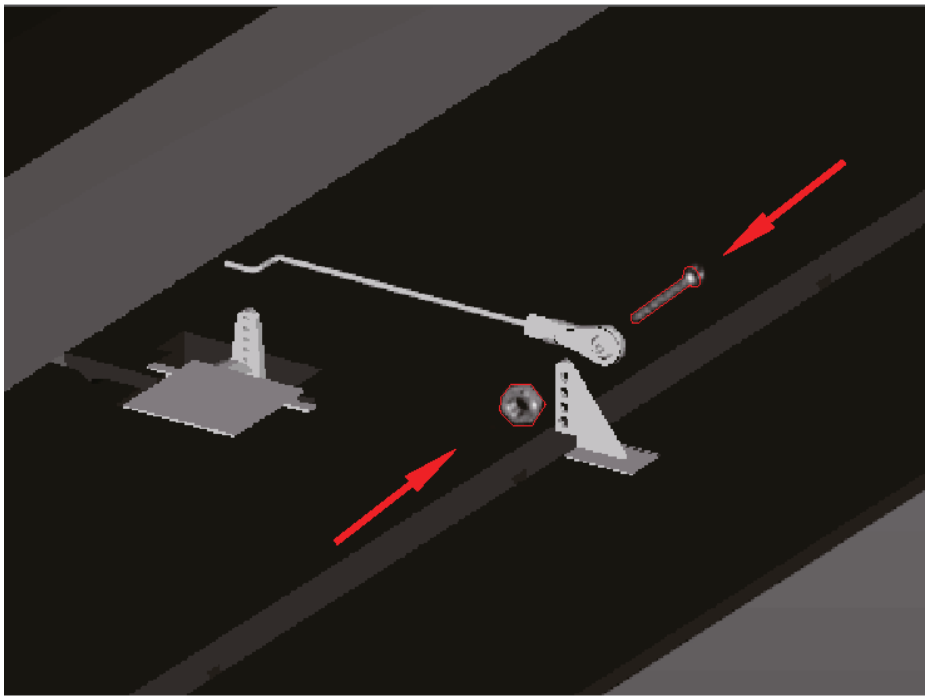
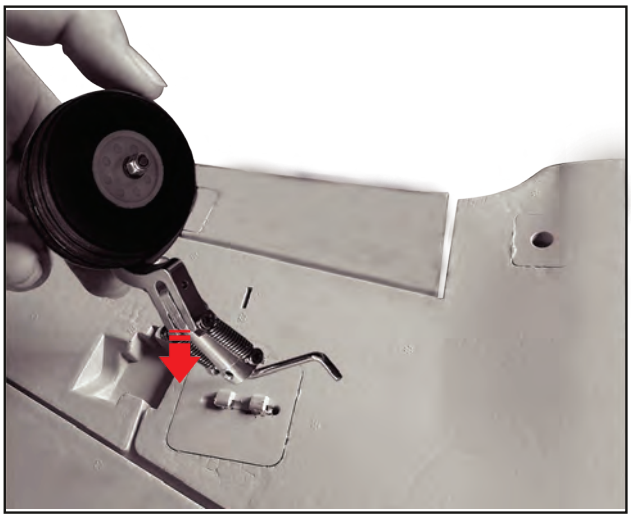


4. *Slide the horizontal stabilizer into position on the rear of the fuselage as shown, then retain using the 2 PM 3x10mm screws provided.*

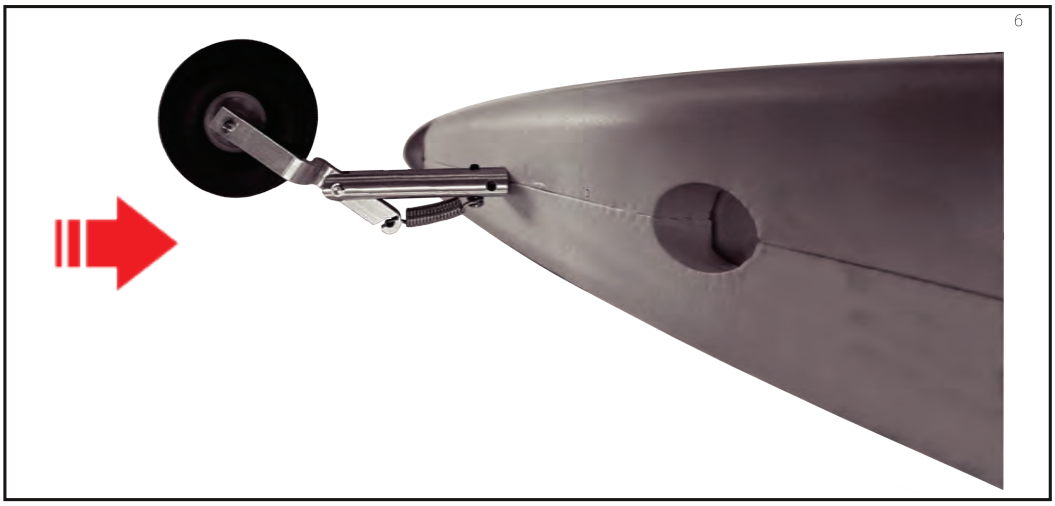
HM 2x10mm 



5. ***Attaching the aileron control rods. First, ensure the the aileron servos are set at neutral and the servo horn is set at 90° to the servo. Slide the control rod "Z" link through the outermost hole in the servo horn. Adjust the ballink on the end of the control rod so that the ballink hole aligns with the hole in the control horn when the aileron is set at neutral. Once satisfied this is correct, bolt the ballink to the control horn using the HM 2x10mm nut and bolt provided.***



6. ***Attach the main landing gear as shown.***

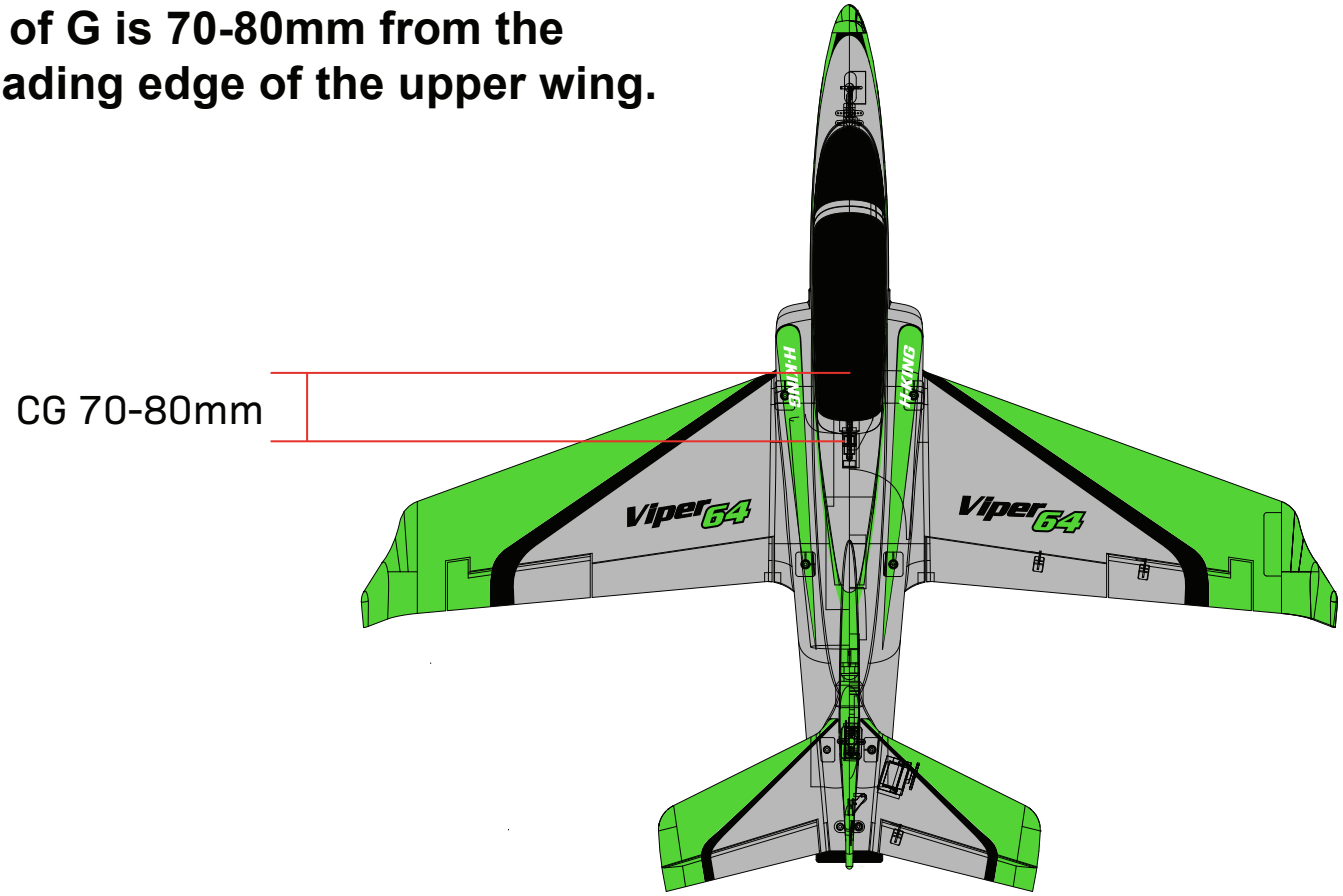


7. *Install the nose landing gear and secure in place with the supplied grub screw.*

The assembly of your Viper 64 is now complete

C OF G SETTING

C of G is 70-80mm from the leading edge of the upper wing.



The correct center of gravity setting is very important and essential for successful flying. It is best to put a couple of pieces of masking tape on the top of the wings near the fuselage and to mark on the tape the forward and rear C of G positions. Then with the battery, or batteries installed, balance the model upside down on the marks and it should balance just slightly nose down, move the battery postion to achieve the correct balance point.

We recommend that for intial flights you balance the model near the forward 70mm mark, then as you get used to the model you can move it more towards the rear mark if you wish.

CONTROL THROWS: HIGH-LOW

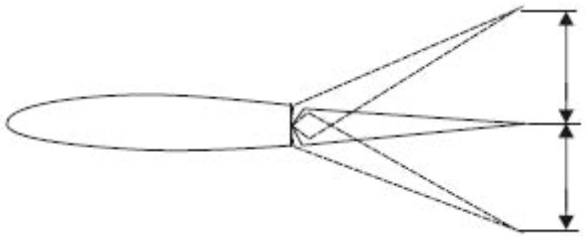
Elevator: 12mm Low - 18mm High

12mm-18mm
12mm-18mm

Ailerons: 8mm Low - 15mm High

8mm-15mm
8mm-15mm

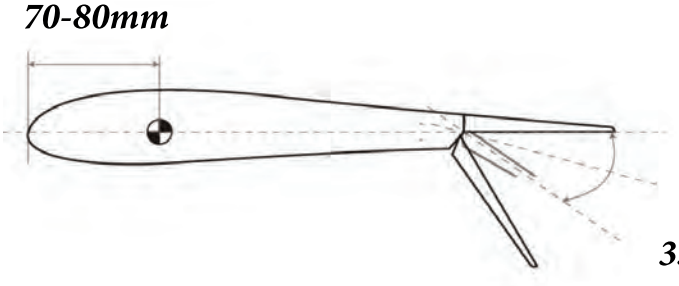
Rudder: 20mm Low - 35mm High



20mm-35mm

20mm-35mm

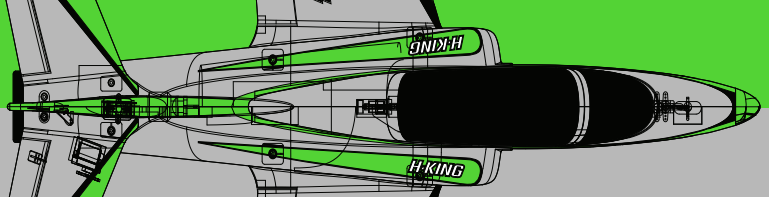
Flaps: Mid Flap 35 degrees (25mm) - Full Flap 70 degrees (50mm)



0°

35° (25mm)

70° (50mm)



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.

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 H-King Viper 64 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 do 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 rudder, 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 Viper 64 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. Mid-flap can be used to shorten the take-off run if need be, once the climb is established and the speed is increasing these can be put away.

Once airborne and safely in the climb carry on to a safe altitude to adjust your trim to get the Viper 64 flying straight and level on about ¾ throttle. If your plane is not flying correctly land and adjust your radio or the Viper's linkages where necessary.

Once you have your Viper 64 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 using your elevator to control pitch and speed, throttle to control descent and ailerons to keep the wings level, and the rudder to keep it lined up with your strip, and simply glide the Viper 64 home. It's a real pussycat and will float into land very easily due to it's low stalling speed. Once you are used to the Viper you can try landing with the flaps. About halfway down your downwind leg of your circuit you can select mid-flap, retrim as necessary. Once lined up on the approach select full flap (you may need to retrim, it's a good idea to mix the flaps with the elevator on your radio to sort this automatically). Once full flap is selected and the model is trimmed you will find you will need a bit of power on the approach to overcome the drag, keep that power on until you round out and start to flare before slowly closing the throttle.

Your maiden and the sweating is now over, recharge your batteries and really have fun with the Vipern64, 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

RADIOMASTER TX12 MKII ELRS FCC 2.4GHz Compact 12ch Transmitter w/Open-Source Edge TX Firmware

SKU: 1022720009

RADIOMASTER (Transparent) Pocket CC2500 FCC 2.4GHz Compact 16ch Transmitter w/Open-Source Edge TX Firmware

SKU: 1022720067

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

SKU: 9114000020-0

OrangeRx Tx10i Mode 2 EU Version 10ch 2.4GHz DSMX Compatible Radio System

SKU: 9171001399-0

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

SKU: 9067000256-0

Turnigy nano-tech 2700mah 6S 65~130C Lipo Pack w/XT-60

SKU: 9210000193-0

Turnigy nano-tech 2650mAh 6S 35~70C Lipo Pack w/XT-60

SKU: 9210000189-0

Turnigy 2200mAh 3S 40C LiPo Pack

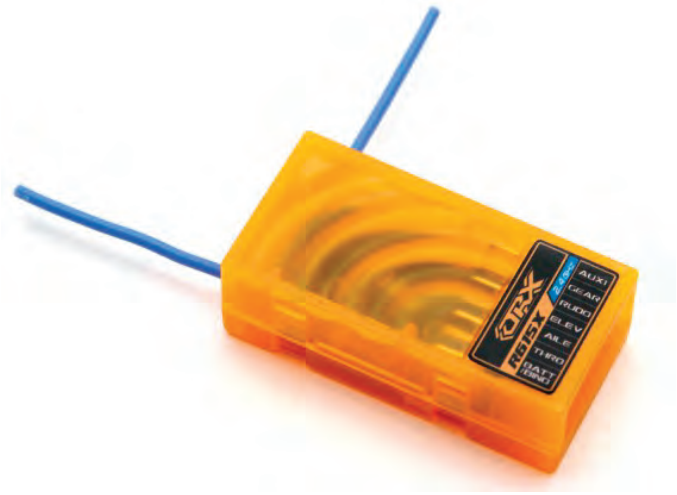
SKU: T2200.3S.40

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

SKU: 9210000266-0

XT60 Series Adapter (2pcs)

SKU: 9992000145-0



OrangeRx R615X DSM2/DSMX
Compatible 6Ch 2.4GHz Receiver
SKU: 9101800001-0

RADIOMASTER ER6 FCC 2.4GHz 6ch
ELRS PWM Receiver w/Dual Antenna
SKU: 1022720041

Turnigy Reaktor T240 LiHV AC/DC 1~6S
10A 2 x 150W Touch Screen Charger

SKU: 9959320008 (EU Plug)
SKU: 9959320006 (UK Plug)
SKU: 9959320007 (US Plug)

Turnigy ACCUCELL C150 LiHV AC/DC
1~6S 10A 150W Smart Balance Charger

SKU: 9959320005 (EU Plug)
SKU: 9959320004 (UK Plug)
SKU: 9959320003 (US Plug)

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MADE IN CHINA