

# 50MM EDF **VEKTOR**

VERSION 1



Length: 760mm/29.9in    Wing Span: 650mm/25.6in    Flying weight: 490g/17.3oz

## **ASSEMBLY AND OPERATION INSTRUCTIONS MANUAL**

# 50MM EDF VEKTOR

---

## Specifications

Wingspan	650mm/25.6in
Length	760mm/29.9in
Height	292mm/11.5in
Flying weight	490g/17.3oz
Total surface area	8.6 dm <sup>2</sup>
Wing loading	57 g/dm <sup>2</sup>
R/C System	2.4G radio set
EDF	50mm duckfan with 2627-4900KV motor
ESC	30A hobby wing sky walker
Battery	3S 1300-1800mah 30C Li-Po
Servo	9g×4




# 50MM EDF VEKTOR

Thank you for purchasing the new 50MM EDF Vektor from Xane. Assembly for this aircraft is kept at a minimum.

This plane is powered by a brushless outrunner motor paired with a factory calibrated electronic speed controller, ailerons, elevator and rudder control surfaces are controlled by servos; all of which are factory installed on the Ready-to-Fly version. If you have KIT version, this manual also will let you know how to assemble it and make the plane to Ready-to-Fly version.

**Please be sure to read the entire manual carefully prior to assembling/operating the Vektor.**

## Specifications

ITEM	SPECIFICATIONS	KIT	ARF	RTF
	Motor: 2627-4900KV	N/A	Installed	Installed
	ESC: Hobbywing 30A sky walker	N/A	Installed	Installed
	Servo: 9g servo 4pcs	N/A	Installed	Installed
	Receiver	N/A	N/A	Installed
	Recommended battery: 3S 1300-1800mah 30C Li-Po	N/A	N/A	Installed
	Recommended battery charger: 3s Li-po balancing charger	N/A	N/A	Installed
	Recommended Transmitter: Full-Range 6 channel 2.4GHZ	N/A	N/A	Installed

## Package Contents

Almost Ready-to-Fly Version

- Fuselage with factory installed motor, electronic speed controller and servos
- Clear canopy and cockpit
- Main wing panels with aileron servos
- Tail wing panels: Vertical stabilizer and Horizontal stabilizer
- Landing gear
- Parts bag

### 1. Before assembling the model

Please check the contents of your kit before you start working on it.

You need :

- Servo-----4pcs
- Motor-----2627-4900KV with ducted fan
- ESC-----30A hobby wing

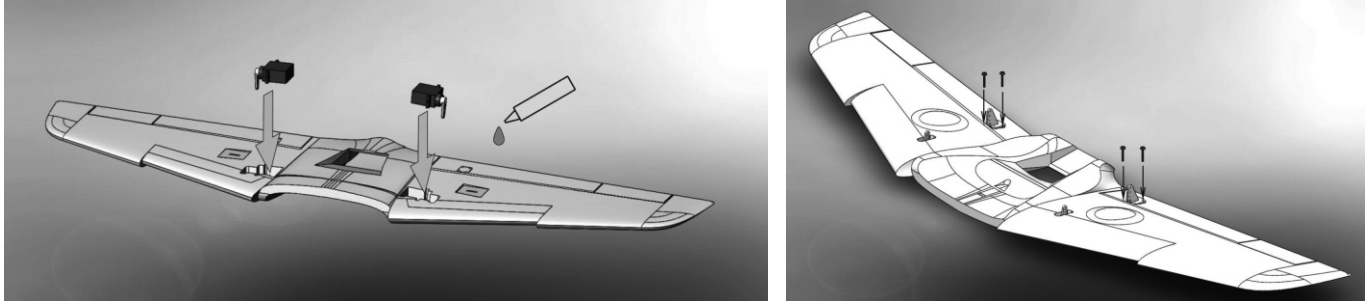


# 50MM EDF VEKTOR

## 2. Preparation

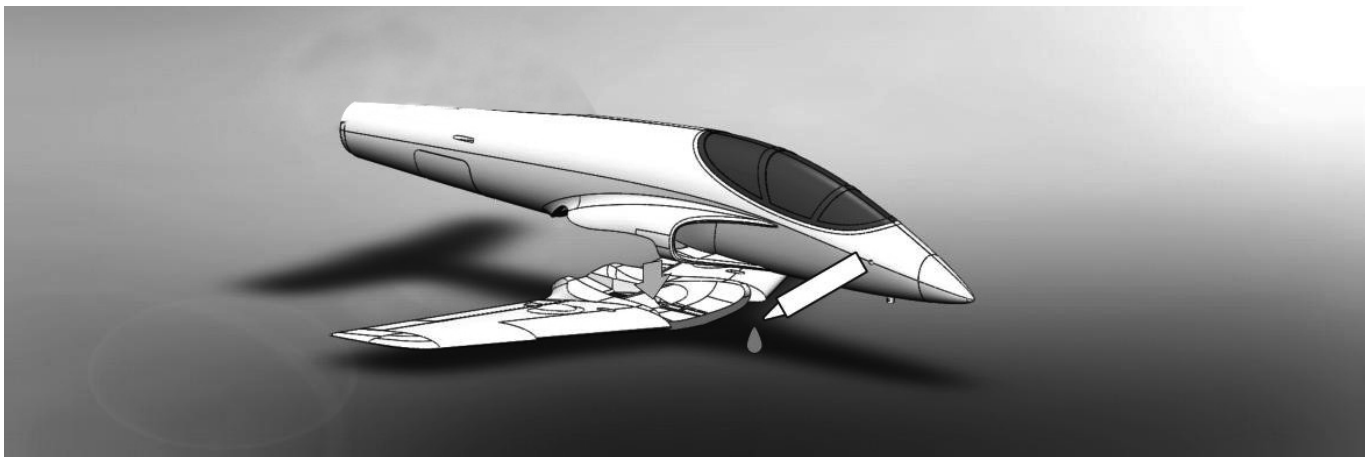
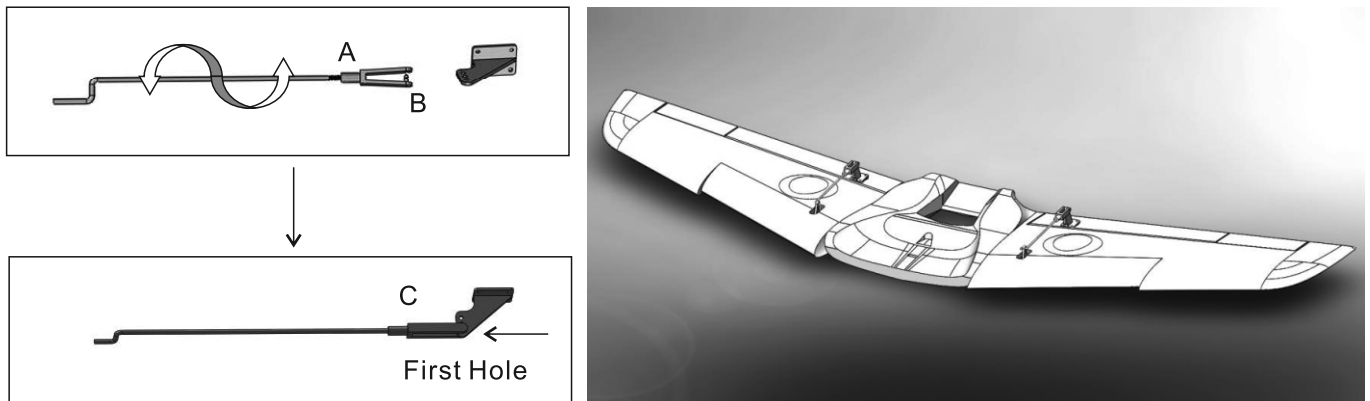
**Fig. 1 Main wing panel.**

- Apply adhesive to the servo holes, and then located the servo into the hole.
- Install the control horns with screw.



**Fig. 2 Main wing panel.**

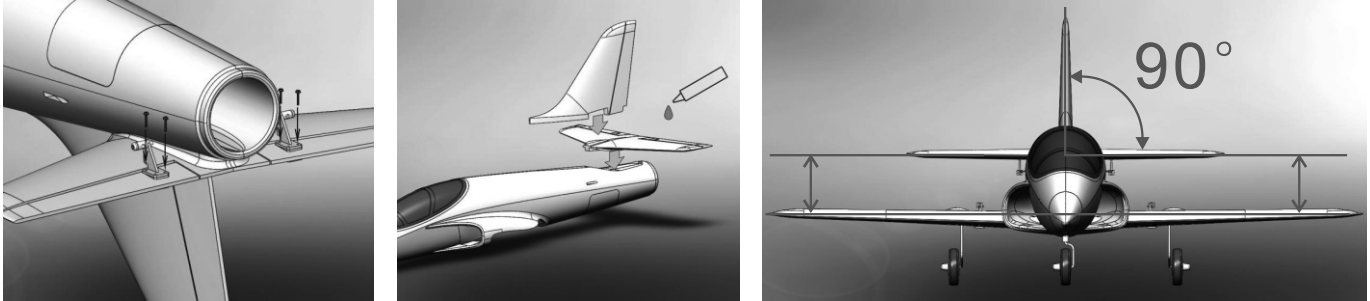
- Adjusting the Clevis
- Turn the clevis (A) clockwise or counterclockwise on the linkage.
- Carefully spread the clevis and put the clevis pin (B) in a selected hole in the control horn (C).
- Connect the push rod with servo arm and control horns
- Connect the two servos with Y-line, then the main wing were assembled.
- Apply adhesive to the main wing and glue it to fuselage. But you need cross the Y-line from the hole first.



# 50MM EDF VEKTOR

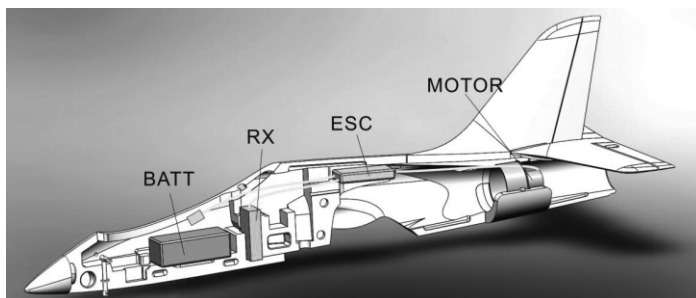
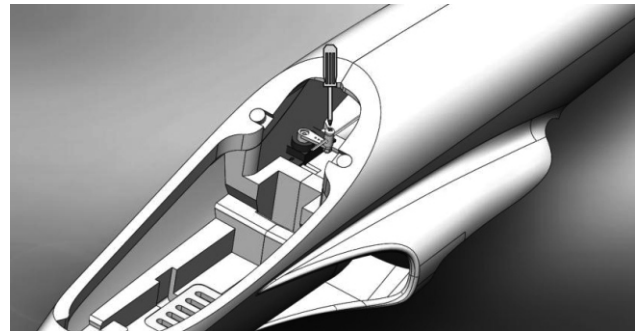
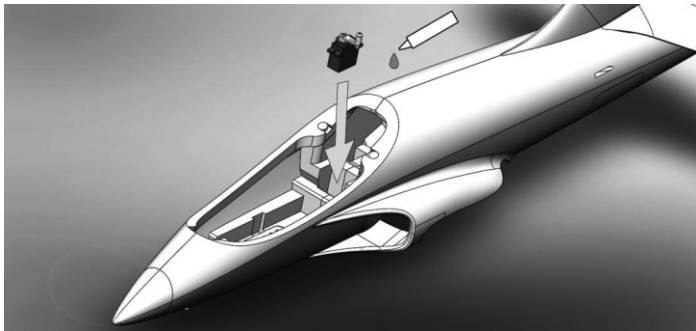
**Fig. 3 Tail wing panel.**

- Apply adhesive to the Vertical stabilizer and Horizontal stabilizer, and then glued with fuselage.
- Screw the control horns at Horizontal.



**Fig. 4 Assembly the fuselage.**

- Apply adhesive to the Elevator servo position, and then glued the servo
- Connect the adapter with servo arm and screw to the servo.
- Cross the hole and screw the linkage.
- Connect the esc and motor, please make sure the motor work right, and then glue the edf to right position.
- Cross the ESC wire to canopy.



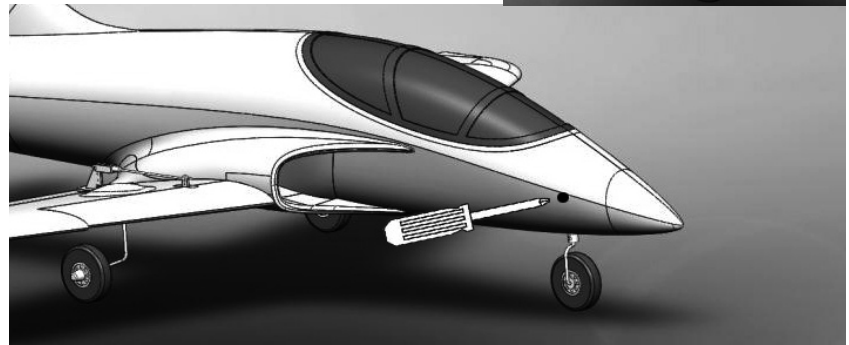
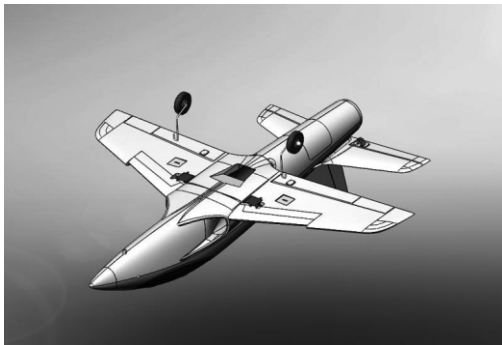
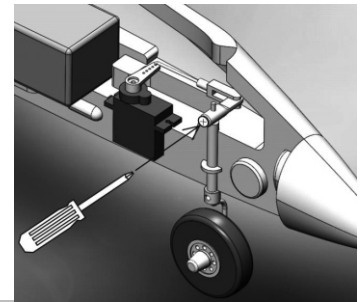
- **Make the elevator linkage cross the control horns (Elevator) and screw it.**



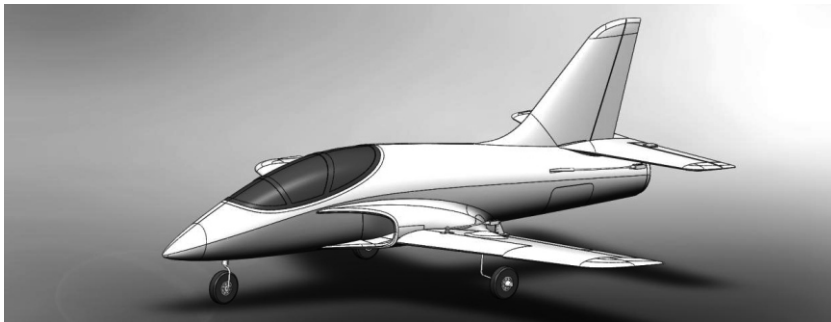
# 50MM EDF VEKTOR

**Fig. 5 Assembly the landing gear.**

- Glue the back plastic set to the main wing.
- Push the main landing gear into the hole of the plastic set.
- Glue the servo to the front landing gear.
- Connect the push rod and adapter for front landing gear.
- Cross the front gear by the hole and screw it.



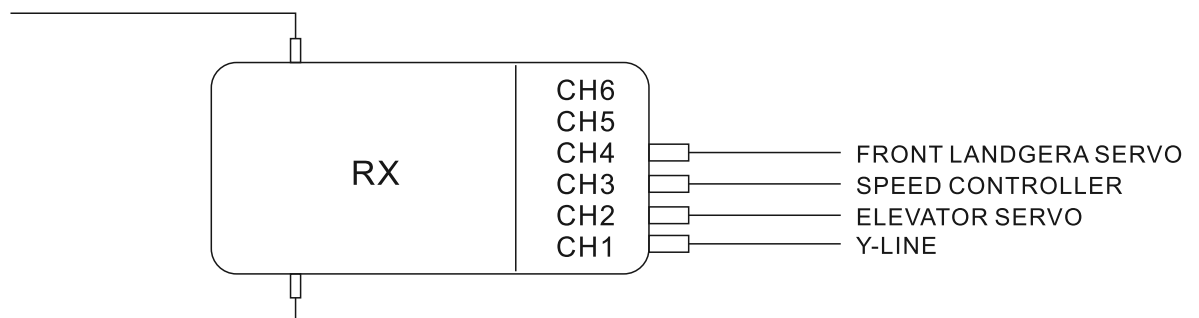
Then the plane were assembled finished.



## 3. Assembly the receiver and battery

### 3.1 Receiver installation

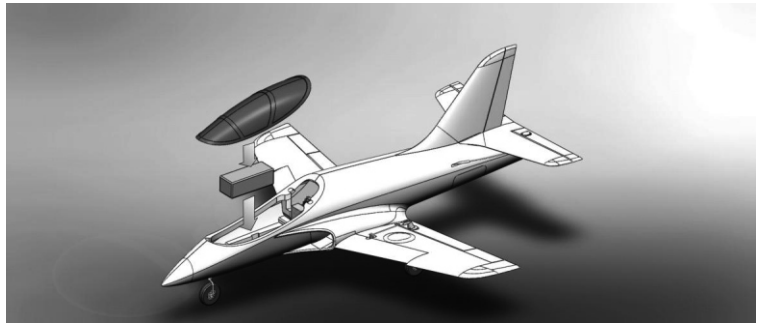
- The receiver has to be installed further aft in the fuselage. Check that the cables are long enough to allow the plugs and sockets to be connected outside the fuselage. The speed controller can be secured in the space under the canopy.
- Connect the Y-line to CH1, elevator servo to CH2, Speed controller to CH3, front landing gear servo To CH4.



# 50MM EDF VEKTOR

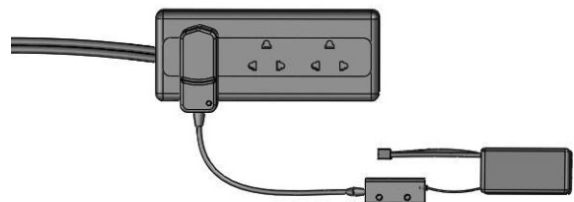
## 3.2 Battery installation

- Install the battery in the model as below pic.



## Fig. 1 LiPo charging instructions

- Charge the LiPo battery by connecting the wall socket adapter (not included) to the balance charger. When power is supplied to the balance charger, connect the charge lead (usually white) of the LiPo battery to the balance charger.
- Always supervise charger while in use and avoid charging battery for extended periods of time (keep charge time under 1 hour and 30 minutes).

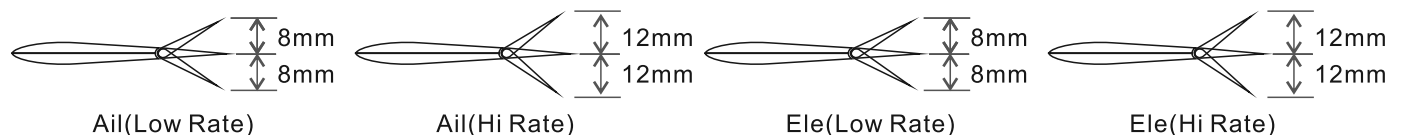


## 4. Checking the power system.

- Power on the transmitter with the throttle stick and trim at the “LOWEST” position then power up the aircraft.
- Hold the aircraft securely.
- Remove any loose objects such as cloths, tools, etc from the area in front of the model.
- Open the throttle (stick forward): the motor should now run and you should feel a strong air flow rushing out from propeller. Please do not bench test the unit for more than 10 seconds as there is no flowing air to cool the unit.
- Move the throttle stick back to the “LOWEST” position.
- Move the Elevator the plane will pitch up or pitch down.
- Move the Aileron the plane will roll right or roll left.
- Move the Rudder the plane will yaw right or yaw left.
- Check the control surface centering
- After assembly and transmitter set up, confirm that the control surfaces are centered
  - 1, Verify the trims and subtrims on your transmitter are 0
  - 2, Power up the model and leave the throttle at 0
  - 3, Verify the control surface tips are mechanically centered.
  - 4, If you need to make an adjustment, rotate the clevis on the linkage to alter the linkage between the servo and the control horn.
- Disconnect the battery from the electronic speed controller and then switch the transmitter off.

### Adjust the rudder surface to horizontal standard

Dual Rates		Low Rate	Hi Rate
	Ail		8mm
Ele		8mm	12mm

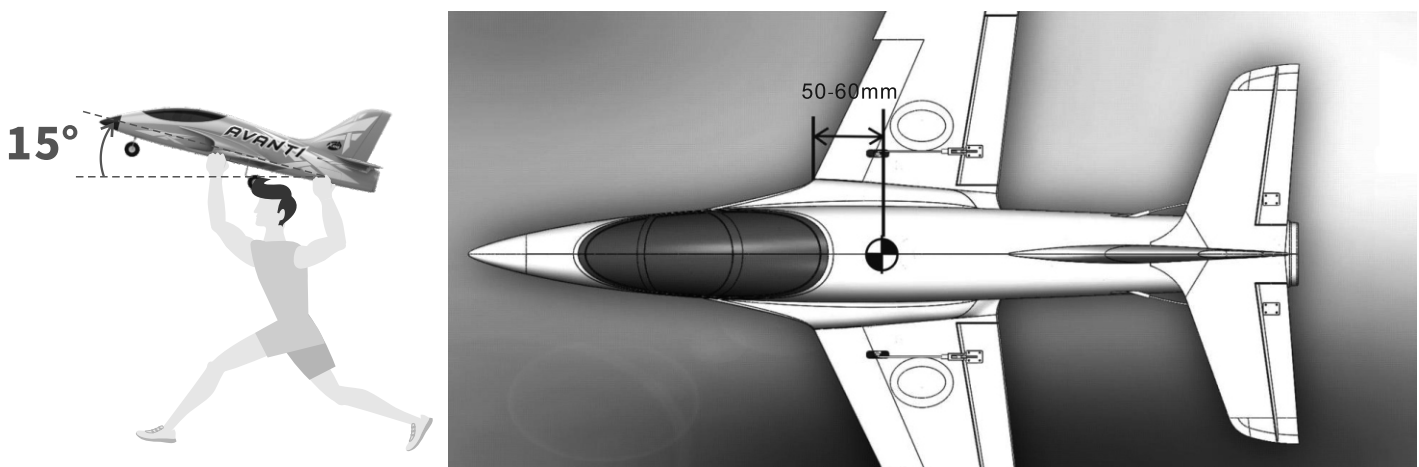


# 50MM EDF VEKTOR

---

## 5. Checking the model's balance.

- Place the flight battery in its compartment without connecting.
- Mark the centre of gravity (CG) on both sides of the fuselage; the position is shown in the photo.
- Support the model at the marked points and allow it to hang freely. When correctly balanced the airplane will remain horizontal with the nose slightly down.
- If necessary, adjust the position of the flight battery to achieve the correct CG.
- Mark the battery location in the fuselage, so that you can be sure of positioning it correctly after recharging.
- Pack scrap pieces of foam around the battery in its final position, otherwise there is a danger of it shifting in flight and altering the model's balance.
- Charge the flight battery and the model is ready for flight.



## Test flying – Notes on flying the airplane.

- For the first flight you should wait for a relatively calm day with no more than a gentle breeze.
- A good flying site is a large, flat, open field; well away from trees, fences, high-tension overhead cables and other potentially dangerous obstacles.
- Carry out a complete check of the working systems.
- All control surfaces respond correctly.
- Adequate throttle response and battery voltage.
- Perform a range check if haven't already.
- We recommend that you ask an experienced modeler to help you initially; to give the model a fairly powerful hand-launch.
- The model must be launched directly into any existing wind.
- Switch the motor on, and launch the airplane strongly into the wind with the wings leveled.
- Allow the vektor to fly straight and level initially; don't try to turn it when it is close to the ground.
- Adjust the trims if necessary so that the model settles into a steady climb.
- Check the model's response to control commands from the transmitter. You may need to increase or reduce the control surface travels once the model is back on the ground.
- Take the airplane up to a safe height and check its stalling speed.
- Keep the speed well up on the landing approach to avoid stalling.
- If you had to move the trims during the flight, correct the mechanical linkages before flying again. This allows you to re-centre the trims, so that full trim travel is available for subsequent flights.