

# EPP Bald Eagle

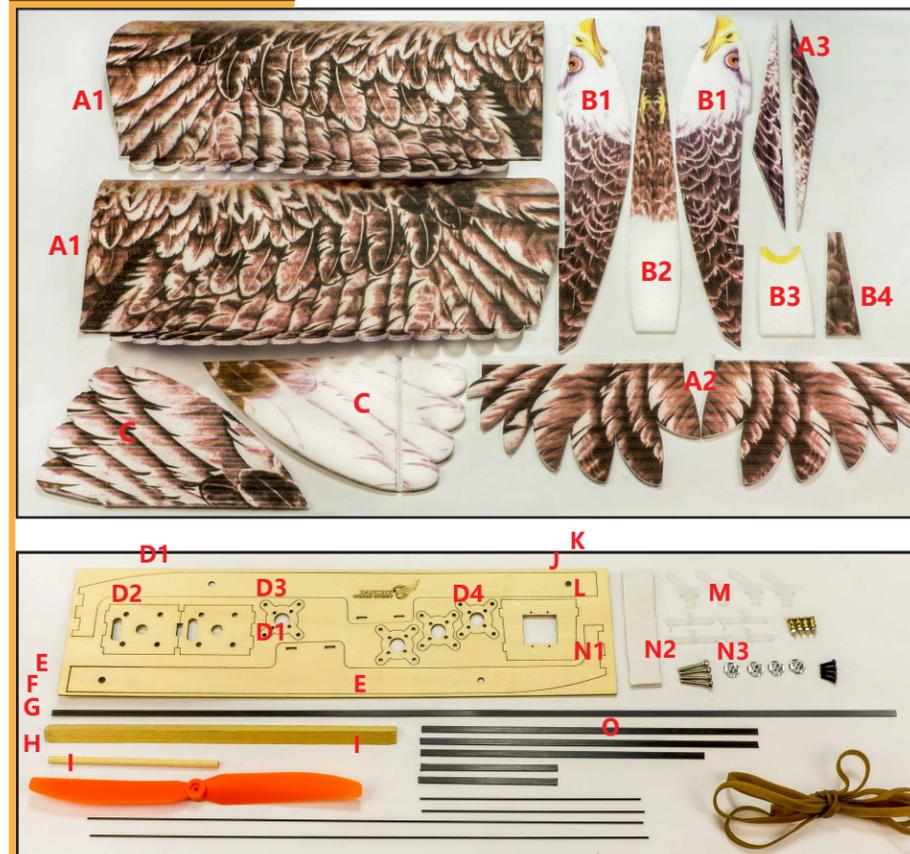
1430mm (56") Wingspan - ARF BUNDLE



## SAFETY NOTICE

- This user manual contains instructions to ensure the correct assembly and setup of this sophisticated flying model aircraft. It is essential to read this manual before attempting to fly this product. This product is not a toy!
- The user assumes all responsibility for the safe assembly and operation of this product. Failure to operate this product correctly may result in damage to the product, property, and/or cause bodily harm. Adult supervision at all times is required.
- Comply with all local rules and regulations regarding the safe operation of this product in your area. The user assumes all responsibility and liability involving the operation of this model. Contact Motion RC's technical support team if you have any questions or concerns, before flying this model
- Always turn on the radio transmitter first before plugging in the battery. After flying, always unplug the battery before turning off the radio transmitter.
- Be wary of the propeller when the battery is plugged into the model. Avoid moving the radio transmitter's throttle until ready for flight.
- Always conduct a thorough range check to verify the radio signal is stable and interrupted before flight.
- This product has been flight tested to meet its intended purpose of casual flying. This is not a high speed or aerobatic model aircraft.
- This product may include some fiberglass and carbon-fiber reinforced plastic parts, which may cause eye and skin discomfort. Use proper care when cutting such materials, and avoid handling or inhaling shavings.
- Contact Motion RC for answers to technical questions, especially before attempting to fly this model aircraft.
- Visit MotionRC.com and MotionRC.eu for complete information regarding warranty policies and limitations

## Included Parts



A1-3: Wing halves B1-B4: Fuselage panels C: V-Tail parts D1-D4: Wood pieces E: Carbon spars F: Triangle shaft G: Wood dowels H: Propeller I: Steel control rod J: Tape K: Servo horns L: Plastic clips M: EZ-Connector N1: Long screws N2: Blind nuts N3: Short screws O: Rubber Bands

## Specifications

Wingspan: 1430mm  
Length: 760mm  
Flying  
Weight≈550-580g  
Format: ARF BUNDLE  
Build Time: 1-2 Hours

## Included Electronics

2216-3000Kv Brushless Motor  
Admiral 30A ESC with XT60 connector  
4pcs 9g Micro Servos  
8x10x2 Propeller

Required Battery: Admiral 3s  
11.1V 2200mAh LiPo with XT60 Connector

Required Radio: 4+ Channel

## Required Supplies

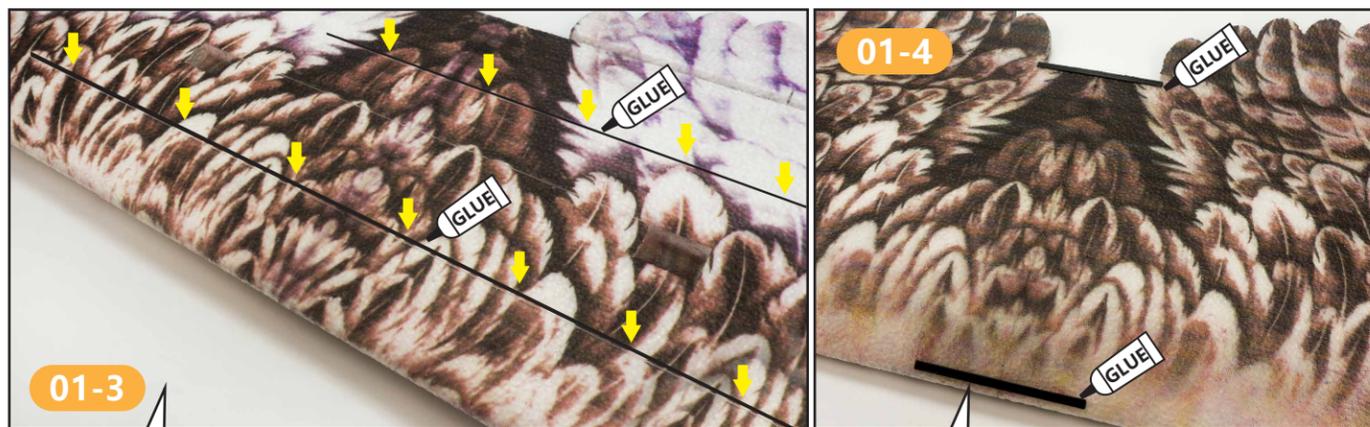
Thick CA Glue  
Accelerator Spray



## 01 Assemble the Wing



Apply glue to the wing joint, ensure symmetric alignment, then bond the two wings together.



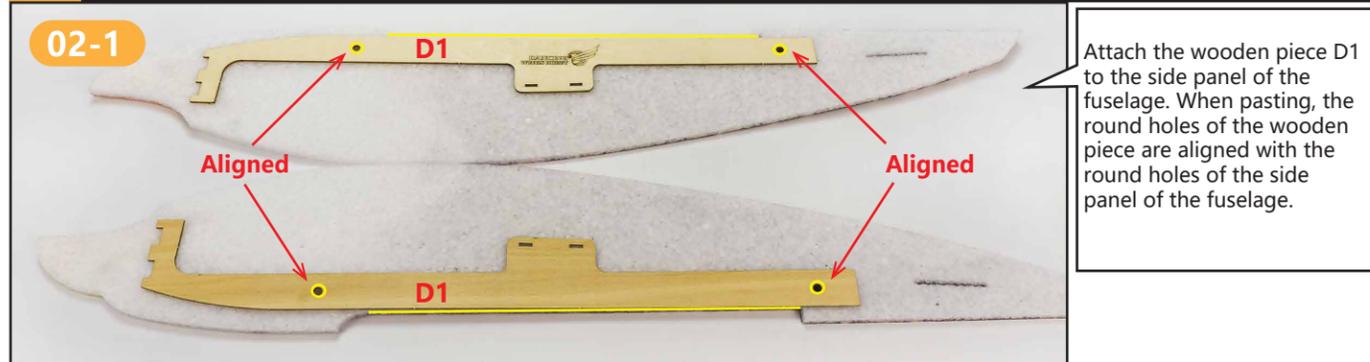
Reverse the bonded wing to the reverse side, then glue and insert the carbon sheets in the reserved groove.

Flip to the front of the wing and attach the carbon sheet to the position above.

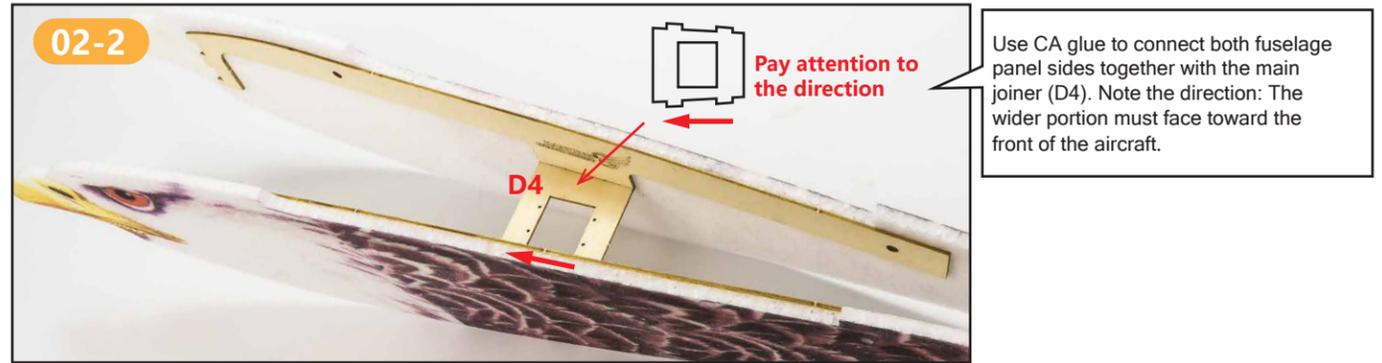


Apply the wing tips to both ends of the wing, then flip it to the back and use the knife to cut off the spare part of the wing tips.

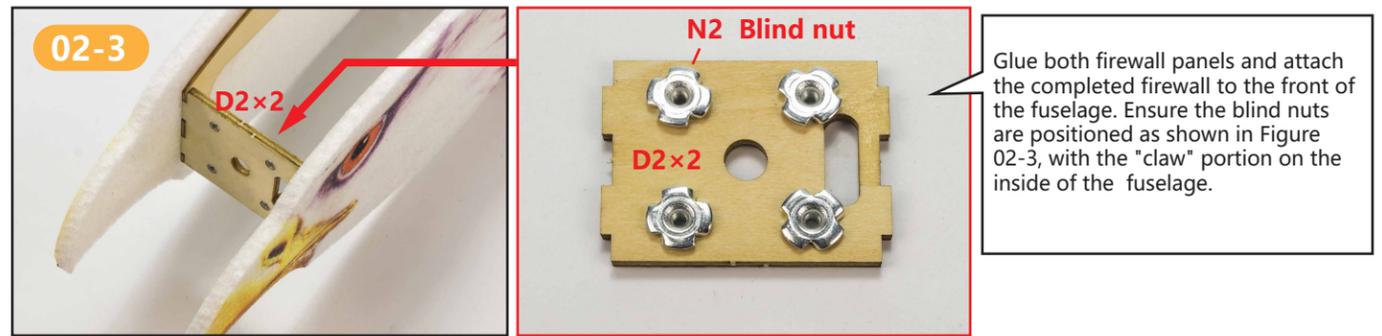
## 02 Assemble the Fuselage



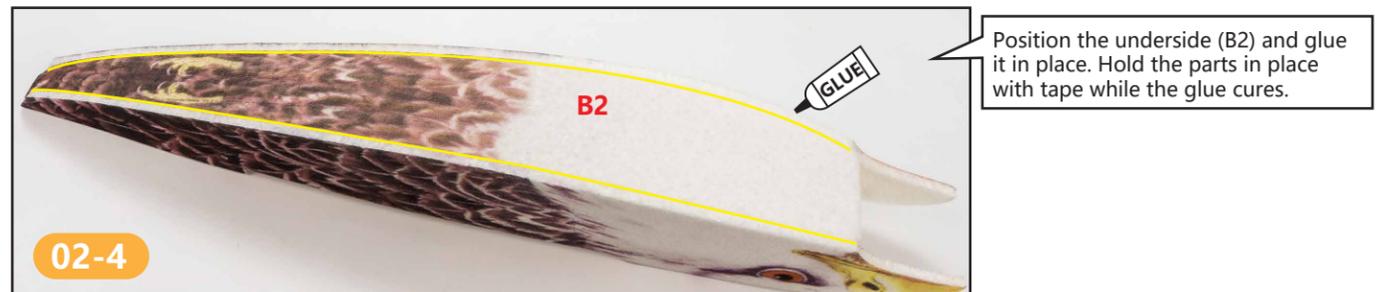
Attach the wooden piece D1 to the side panel of the fuselage. When pasting, the round holes of the wooden piece are aligned with the round holes of the side panel of the fuselage.



Use CA glue to connect both fuselage panel sides together with the main joiner (D4). Note the direction: The wider portion must face toward the front of the aircraft.



Glue both firewall panels and attach the completed firewall to the front of the fuselage. Ensure the blind nuts are positioned as shown in Figure 02-3, with the "claw" portion on the inside of the fuselage.

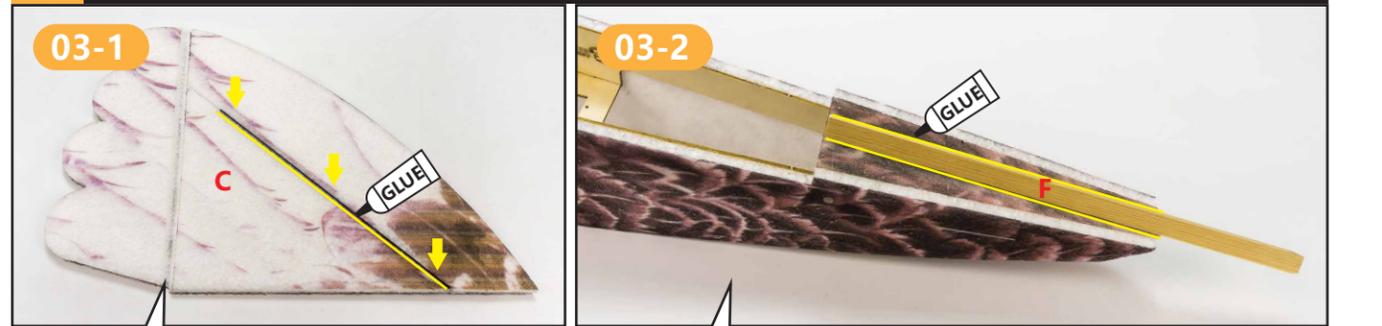


Position the underside (B2) and glue it in place. Hold the parts in place with tape while the glue cures.



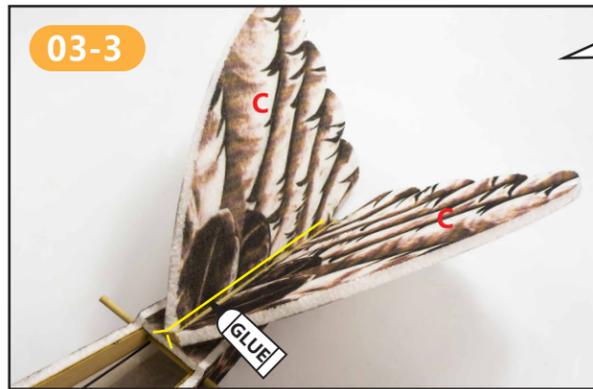
Glue Panels B3 and B4 to the upper surface of the fuselage.

## 03 Assemble tail wing

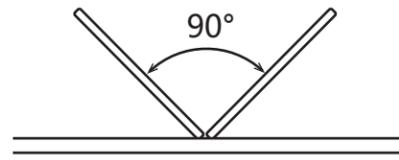


Insert a carbon sheet in the reserved groove of the tail and glue it with glue.

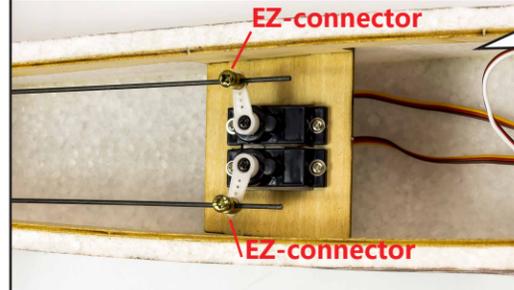
Paste the triangle wood at the end of the fuselage (as shown above).



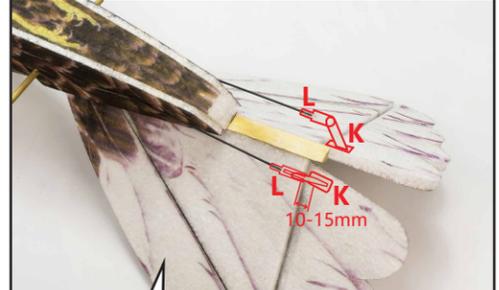
03-3 Glue the two tail panels onto the triangle wood to form a 90 degree "V" shape. Note that the "top" surface of the panel is a different color than the "bottom" surface of the panel.



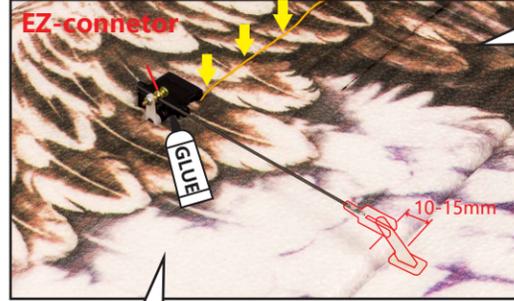
**04 Servo, Servo horn and Linkages**



Install the servos and EZ connectors as shown, insert the steel control wire rod into the EZ connector. Lock the EZ connector with a #1 Phillips screwdriver.



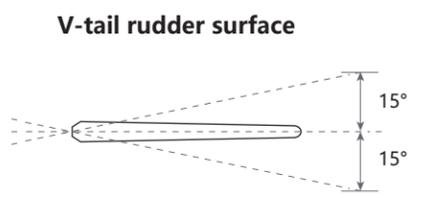
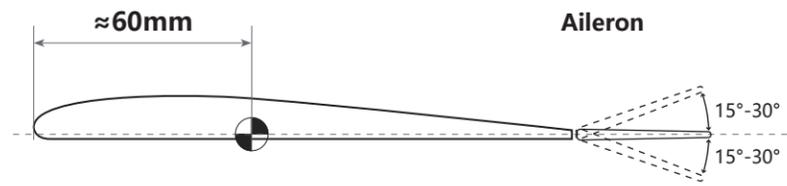
Pass the linkage rod through the fuselage and out the hole at the tail. Connect it to the control horn. Then glue the control horn to the V-Tail surface, with the control horn's hole being aligned with the control surface's hinge, as shown.



Install the servo in the reserved hole of the wing, glue it with glue, and bury the servo wires into the reserved slot and guide it to the middle of the fuselage.

Center the servo so its servo arm is perpendicular to the servo body. Clip the plastic clevis to secure it to the control horn, then insert the opposite end of the steel wire into the EZ connector on the servo arm. Glue the control horn into the control surface. Finally, adjust the position of the control surface, then tighten the EZ connector.

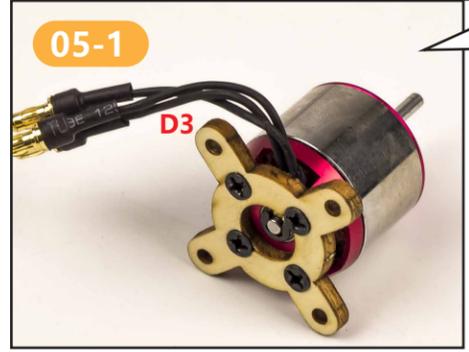
**Recommended Control Throws**



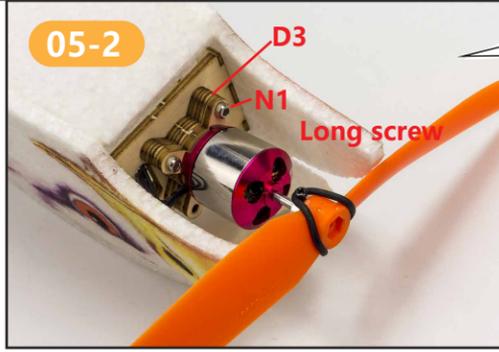
	Normal Flying	Sport Flying
Aileron	± (15°-30°)	±40° (or larger)
Elevator	±15°	±40° (or larger)
Rudder	±15°	±40° (or larger)
Flap	( take-off) 15°-20°	( Landing) 20°-40°

We recommend programming your radio transmitter to use a High, Medium, and Low rate for all control surfaces. Test fly the model to find your preferred balance of control throw and Exponential.

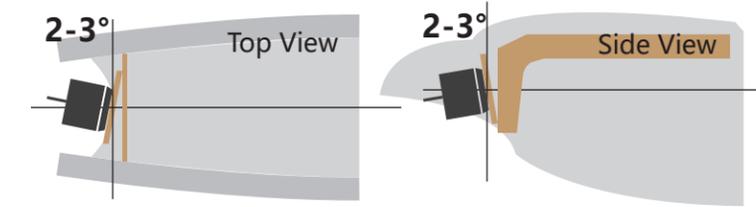
**05 Install the Motor and Propeller**



05-1 Secure the motor onto the motor mount D3.



05-2 Secure the motor to the firewall. Utilize the shims (D3) to ensure the propeller clears the front of the foam.



When installing the motor, remove material from the wood firewall as needed and shim as needed to achieve the "Thrust Line" as shown in the diagrams to the left. When viewed from the side, the motor should angle downward 2-3 degrees. When viewed from above, the motor should angle to the right 2-3 degrees.

**06 Assemble the Wing**



06-1 Insert the wood dowels into the pre-drilled holes as shown above.

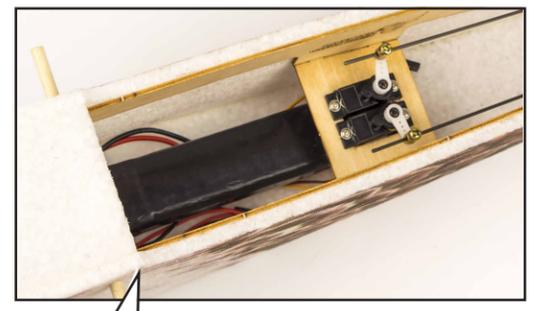


06-2 Place the wing in the center of the fuselage and lock the wing with rubber band as shown above. Inspect and replace the rubber bands as they age.

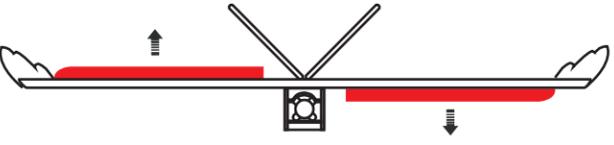
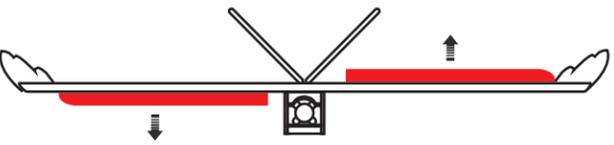
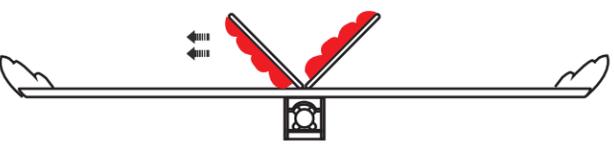
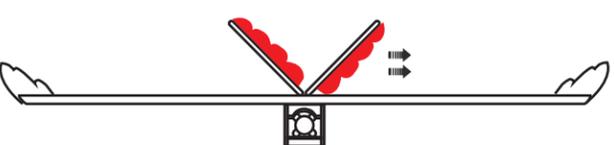
**07 Install the ESC, Battery, and adjust the Center of Gravity ("CG")**



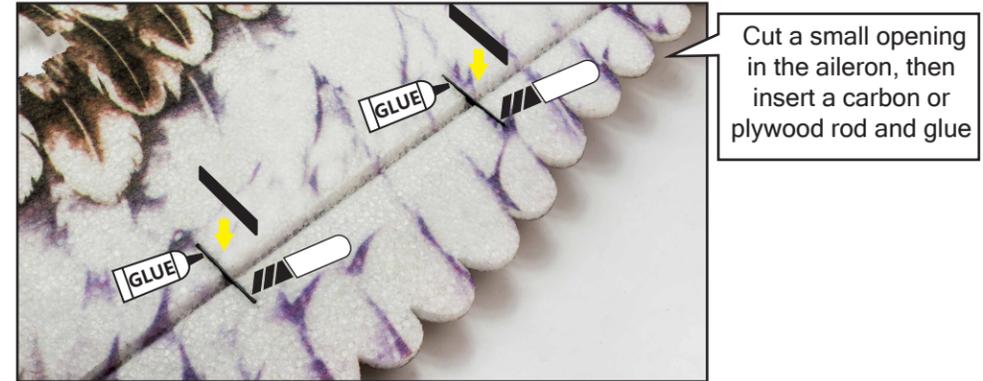
The CG range, shown in green, is 58mm-62mm behind the wing's leading edge (the red line)



Put the battery inside the fuselage, adjust the position of the center of gravity, and then mark the battery's correct position.

	Command	Control Surface moves toward this direction
<b>Elevator</b>	Pull elevator back	
	Push elevator forward	
<b>Aileron</b>	Bank to the right	
	Bank to the left	
<b>Rudder</b>	Yaw to the right	
	Yaw to the left	

Note: Users may also choose to disable the Aileron function and instead configure their Skynetic EPP Eagle in "V-Tail" mode, using the V-Tail to control both elevation and roll. To facilitate this mode, lock the ailerons in place as shown below, so they cannot move.



### PRE-FLIGHT CHECKS

- Check/adjust servo centering, in order to adjust the control surface better. Ensure sufficient trim is available
- Calibrate the ESC's throttle range
- Set a three position switch for High, Middle and Low rates in your radio transmitter
- Program a "throttle lock", if such a feature is available on your radio transmitter
- Conduct a thorough range check at an appropriate distance
- Orient the receiver antenna in an optimal position to reduce interference
- Double-check the spinning direction of the motor to ensure thrust is directed toward the airplane's rear
- Ensure all screws, bolts, cabin and canopy are secure. Remove any dirt or debris within the fuselage
- Ensure the flight battery is in good condition, is fully charged, and is secure within the model airplane
- Set the center of gravity (CG) at the position that manual already marked out. If necessary, add weight to the nose or tail to ensure the best flight performance. Ensure the battery cannot shift during flight
- Ask a trusted spotter to hand launch the model for your first flight. A strong throw into a headwind with 70%+ throttle is recommended. Ensure the launch angle is approximately 10-20 degrees up. Allow sufficient time for the model to accelerate and gain adequate speed before you begin maneuvering.
- Land within 2 minutes, check the battery voltage, and gradually increase flight time until the model lands at 3.72-3.75V per cell. Avoid over-discharging the battery, which may result in damage or loss of the airplane.