

# MX2



**H-KING (PNP) MX2  
EXTREME 4S EPO  
3D AIRPLANE**

**INSTRUCTION MANUAL**

***H·KING***

Please read this manual carefully before operating this plane.

# MX2



## INTRODUCTION:

The H-King MX2 3D was designed to be an all-out 3D performer with great, straight precision flying capabilities. It has a great combination of lightweight, durability, and performance with none of the compromises normally found in EPO foam aerobatic models. Michael Wargo, our team pilot, and 3D expert helped fine-tune the MX2 Extreme 3D into the type of plane he enjoys flying. The result is an aircraft that delivers lightning-fast rolling, amazing straight lines, and extreme tumbling, but it also likes to perform all of the low and slow 3D maneuvers pilots love.

The MX2 is the perfect aircraft for any pilot wanting a versatile and capable 3D plane. This MX2 is the next generation of EPO foam designs that are lighter and more capable than ever. Any accomplished 3D pilot will love this plane because it will satisfy the most discriminating pilot. Its high-energy performance defines this plane, but bring it in low and slow, and it is rock solid and easy to harrier and hover.

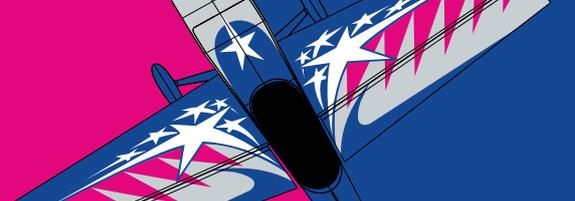
This Plug-N-Fly 3D airplane is very quick and simple to assemble and is supplied in a striking red, white, and blue pre-printed finish, with carbon landing gear, wheels, and wheel spats. Power is supplied by the pre-installed 3702-900KV brushless motor driving a fine pitch 13x4 composite propeller, and a 60A ESC, this is the perfect set-up for excellent throttle response when performing 3D. Also supplied and pre-installed are 4 x 13g high-speed, metal-gear digital servos, these high-quality servos have an excellent resolution and speed for precise control.

The MX2 Extreme is easy to transport due to its removable wings and is fantastic fun to fly just about anywhere. If you are looking for an airplane to progress into 3D aerobatic flying, and to take your flying skills to the next level, then the H-King MX2 Extreme is the perfect choice.



## SPECIFICATIONS:

- Wingspan: 1270mm
- Length: 1210mm
- Materials: EPO
- Flying Weight: 1240g (excluding battery)
- Battery: 2200mAh 4S (14.8V) 45~90C LiPo w/XT60 (not supplied)
- Flight Time: Approx 5mins with 2200mAh battery
- Propeller: 13x4
- Radio: 4ch or more
- ESC: 60A brushless with 4A switching BEC
- Motor: 3720-900KV brushless



## 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 suitable open outdoors space.

- This is a radio controlled flying model and as such must always be flown with caution, this is NOT a toy.
- Always exercise great caution when using the recommended battery to power this product. For full safety notes and operating procedures please read the information provided by your battery supplier.
- Take great care when connecting/disconnecting the battery. Once again see your battery suppliers information for the full safety procedures.
- Never power up the model in a confined space and always keep the propeller clear of obstructions, clothing and parts of your body.
- This product is not a toy, children must be accompanied by an adult at all times when operating this product.
- Only fly this model in an open area away from crowds, people, buildings, trees, power lines, roads, airports 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 this product. A reminder that it is not suitable for children under the age of 14. THIS IS NOT A TOY.



## WARNING:

Read this instruction manual fully so as to become completely familiar with the features of the 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 including safety, assembly, set-up and flying guidelines in order to operate this product correctly and avoid damage or serious injury.

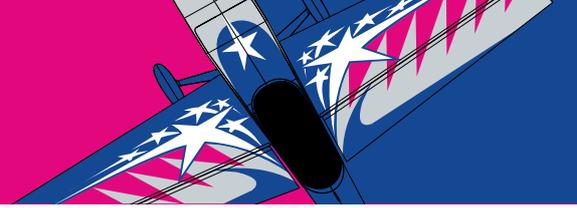


## INTRODUCTION:



1. Fuselage
2. Left main wing
3. Right main wing
4. Wing protectors
5. Rudder
6. Carbon fiber wing joiner rod
7. Wheel spats and wheel sets

8. 13 x 4 Propeller
9. Servo Y lead
10. Tail-wheel bracket assembly
11. Carbon fiber landing gear
12. Spinner
13. Pushrod linkages
14. Wheel spats and wheels
15. Plywood washer



## ASSEMBLY INSTRUCTIONS:

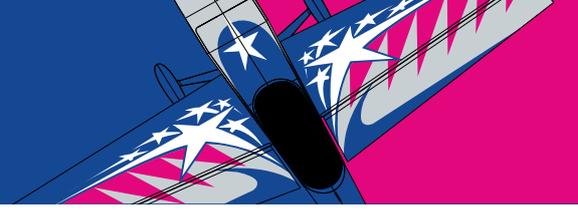
### Horizontal Stabilizer Installation.

Apply a thin coat of foam safe glue to the stabilizer mid-section and gently slide it into place as shown. Check frequently if the stabilizer is level and square to the fuselage as the glue dries.



A small piece of white foam comes with the fuselage. Apply some foam safe glue and place into the slot between the lower part of the rudder post and the rear of the fuselage to further reinforce the structure of the empennage.





## Rudder installation.

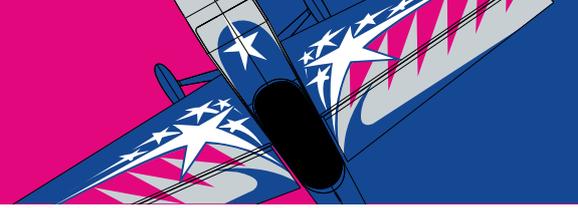
Insert the pre-installed rudder hinges into the fin and apply foam safe CA glue to secure in place. Check frequently to ensure that the rudder moves freely as the glue dries.



## Tail wheel installation.

Insert the tail wheel landing gear wire into the small hole in the rudder. Then install the plastic bracket on to the rear of the fuselage and secure it using the supplied 3mm self-tapping screw as shown.





## Rudder installation.

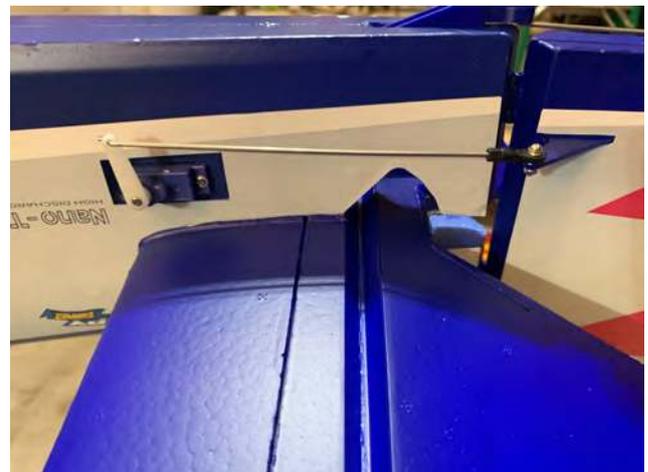
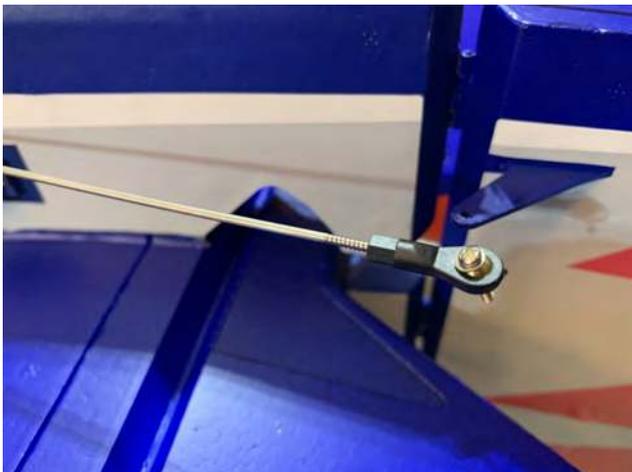
Install one of the supplied M3 x 35mm bolts through one of the wheel spat outer halves and add a plywood washer and wheel as shown. Then slide on the inner half of the wheel spat, pass the remaining part of the bolt through the hole in the carbon landing gear, then secure the spat/wheel assembly in place by using the supplied M3 nut. Apply some thread locker to the thread to prevent any loosening in flight. Repeat this process for the other spat and wheel. Secure the carbon fiber landing gear onto the landing gear mount on the underside of the fuselage using the supplied M4 x 30mm screws as shown.

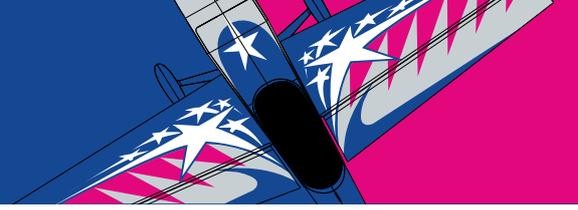


## Rudder and elevator pushrod installation.

Before you install the pushrod to the servo, ensure the servo control arm is perpendicular to the servo case. Install the end of the pushrod with the Z bend on into the outer most hole on the servo control arm. Then connect the ball socket end onto the rudder surface control horn, secure it with the supplied screw and retaining nut. Apply some thread locker to keep it secure.

Repeat the above steps for the elevator control linkage installation.





## Main wing installation.

Install the carbon wing joiner rod through the fuselage. Then slide the left wing panel onto the rod and feed the aileron servo lead through the hole in the fuselage at the same time. Secure the wing panel by using the supplied nylon wing bolt. Repeat the above steps for the right wing panel installation.

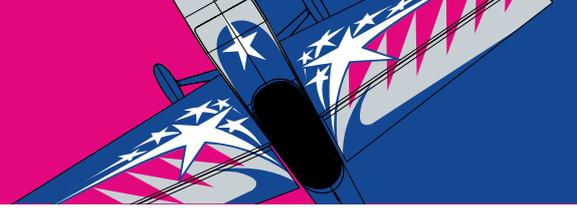


## Prop and spinner installation.

1. Install the prop hub adapter onto the motor shaft.
2. Install the spinner back plate onto the prop adapter, followed by the propeller.
3. Install the washer and the M8 nut, tighten the nut with a spanner. Attach the spinner nose cone to the backplate using the supplied self-tapping screws. You may need to adjust the backplate and the spinner cone accordingly by loosening the prop nut and moving it a fraction until the screw holes are perfectly aligned together.
4. When you are satisfied with the fit, tighten the prop nut and secure the spinner with the self-tapping screws.

**Note:** To achieve the best possible power and performance from the power train as well as ensuring you reduce the vibration on the airframe, always balance the propeller and spinner properly before flying.





# Your H-King MX2 Extreme 3D is now complete.





## SETTING-UP THE H-KING MX2 EXTREME 3D:

### Travel Settings:

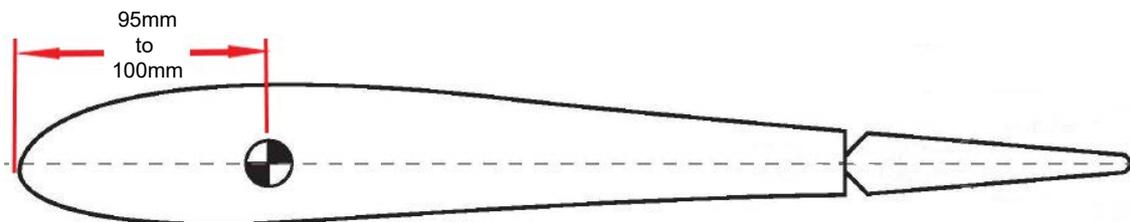
Each flight control must be set to its physical limits. This means as far as it will go, but no farther than it has to. You set this by selecting the servo, fully deflect the surface with the transmitter, then increase (or occasionally decrease) the percentage to where the flight surface will not travel any further. Then simply back off a click or two and you are done. Then, deflect it in the opposite direction and repeat the process. This must always be done for rudder, ailerons, flaps and elevators. Your travel/end point settings must be above 100% to achieve full performance from each servo.

### Rates and Exponential

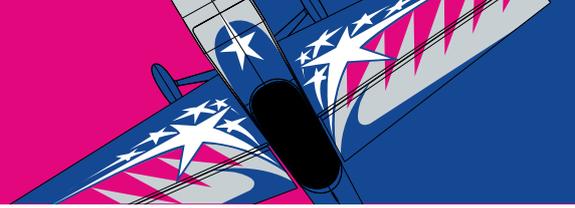
All rates at 100% for full 3D flying. Put the stick at one third and set to where when you switch between rates the surface hardly changes. Obviously at the end points it is an enormous difference.

Our Recommended expo settings for low rates is in the 20% range for an aerobatic plane, and expo in the 60% to 70% range for high rates for 3D.

### C of G Position:



**Happy Flying!**



## RECOMMENDED PRODUCTS:



**Turnigy Graphene Panther  
2200mAh 4S 75C Battery Pack**  
SKU: 9067000372-0



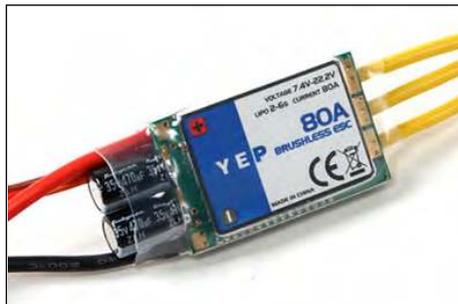
**Turnigy Graphene 2200mAh 4S  
45C Lipo Pack w/XT60**  
SKU: 9067000136-0



**Turnigy Nano-Tech Plus  
2200mAh 4S 70C Lipo Pack  
w/XT60**  
SKU: 9210000301-0



**Aerostar Composite Propeller  
13x4 Grey (1pc)**  
SKU: 9329000187-0



**YEP 80A (2~6S) SBEC  
Brushless Speed Controller**  
SKU: 9351000017



**OrangeRx Tx10i Mode 2 EU  
Version 10ch 2.4GHz DSMX  
Compatible Radio System**  
SKU: 9171001399-0



## SPARE PARTS



**Fuselage**

SKU: 9152000026-0



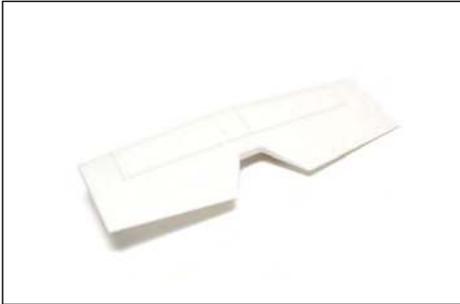
**Main wing set**

SKU: 9152000027-0



**Rudder**

SKU: 9152000031-0



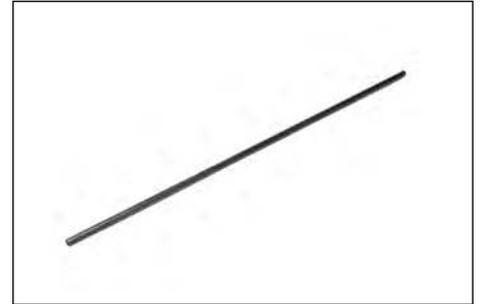
**Horizontal stabilizer**

SKU: 9152000030-0



**13 x 4 prop**

SKU: 9152000035-0



**Carbon fiber wing joiner**

SKU: 9152000032-0



**2 blade spinner**

SKU: 9152000033-0



**Canopy hatch**

SKU: 9152000029-0



**Carbon fiber landing gear**

SKU: 9152000034-0



**Cowling**

SKU: 9152000028-0



**Motor**

SKU: 9152000036-0

# ***H·KING***



**APEX CE SPECIALISTS LIMITED**

89 Princess Street, Manchester,  
M1 4HT, UK



**APEX CE SPECIALISTS LIMITED**

Unit 3D North Point House,  
North Point Business Park,  
New Mallow Road, Cork, T23 AT2P, Ireland



Made in China