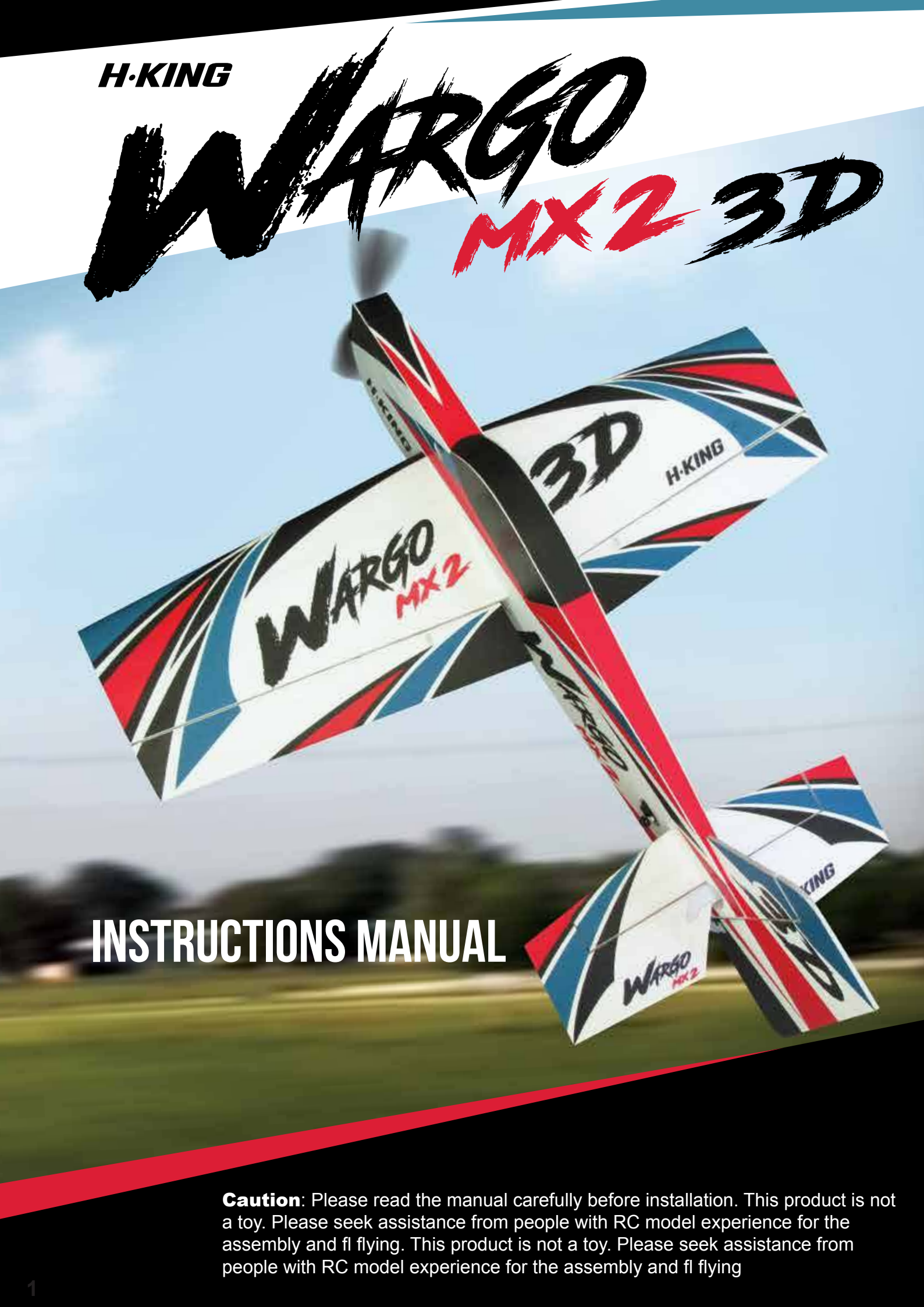
H·KING

WARGO MX2 3D



INSTRUCTIONS MANUAL

Caution: Please read the manual carefully before installation. This product is not a toy. Please seek assistance from people with RC model experience for the assembly and fl flying. This product is not a toy. Please seek assistance from people with RC model experience for the assembly and fl flying

The Wargo Signature MX2 is the next step of my goal to provide a line of perfect 3D and aerobatic training aircraft. I have dedicated a lot of my flying career to teaching 3D aerobatics and helping pilots learn how to become better pilots. I have also dedicated myself to trying to develop the ideal transition and training 3D plane. I am proud to offer you the Wargo MX2. It is a foam aircraft that is stiffer and precise with a short moment to improve your 3D, Tumbling and precision flying. The Wargo MX2 is perfect to take a pilot from sport flying to confidently flying 3D aerobatics. Michael has dedicated much of his career to aerobatic training and teaching 3D aerobatics and trying to find the ideal foamy to take pilots to the next level. The result is a phenomenal plane that will hover, harrier and tumble incredibly well. Any accomplished 3D pilot will love this plane because it will satisfy the most discriminating pilot. It will perform maneuvers ultra-light foamies cannot because it has a bit better ability to carry momentum and perform more high-energy and tumbling type of maneuvers. The Wargo MX2 is a blast to fly, and is small and light enough to fly anywhere and transport just as easily.

I hope you enjoy flying your new plane as much as I enjoy it.

Happy Flying!

Open the package and check the contents carefully. If you have found any missing/ damaged parts, please contact our customer service for help.

PRODUCT SPECIFICATIONS:

Wingspan: 955mm
Length: 983mm
Wing area: 24 dm2
Brushless motor: 2216 2217 2834 (KV 1250)
ESC: 30 A with BEC
Propeller: 10 x 4.7
Lithium battery: 3s (1000 to 1500 mAh) 25c battery Servos: 9g plastic gear x 4

Total weight: about 630 g (including a 3s1000 mAh 25c battery)
Center of Gravity: 75mm from the wing's leading edge.

REFERENCE POWER CONFIGURATION:

Brushless motor: 2216 2217 2834 (KV 1250)
ESC: 30 A
Propeller: 10 x 4.7
Lithium battery: 3s (1000 to 1500 mAh) 25c battery

CONTROL SURFACE DEFLECTIONS:

Ailerons: high rates: 40 degrees, low rates: 25 degrees
Elevator: high rates: 45 degrees, low rates: 25 degrees
Rudder: high rates: 45 degrees, low rates: 25 degrees

FLIGHT PRECAUTIONS:

1. Do not fly in bad weather with poor visibility.

2. Do not fly near crowds, high - voltage lines or in areas with strong electromagnetic interference.

3. Do not fly near tall buildings, trees, street lights or other obstructions.

4. If you are flying for the first time, please fly under the guidance of an experienced person.

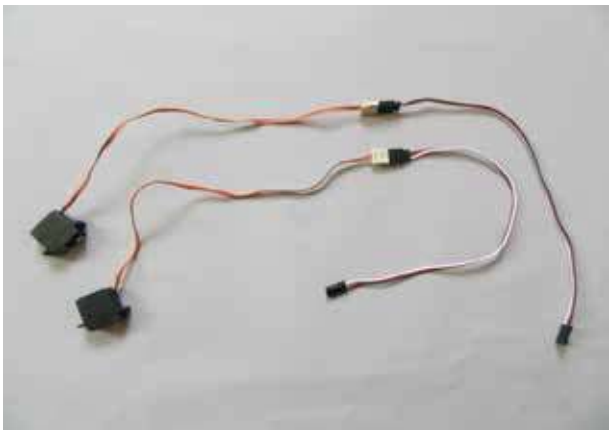
5. Remember, a model airplane is not a toy and you are solely responsible for it.

STORAGE PRECAUTIONS:

1. Remove the battery before storing the model to prevent the risk of explosion or combustion.

2. Do not put objects on the model - hang it up if possible.

Note: Due to continuous improvement of this product, the instruction manual and the product will be revised without any notice.

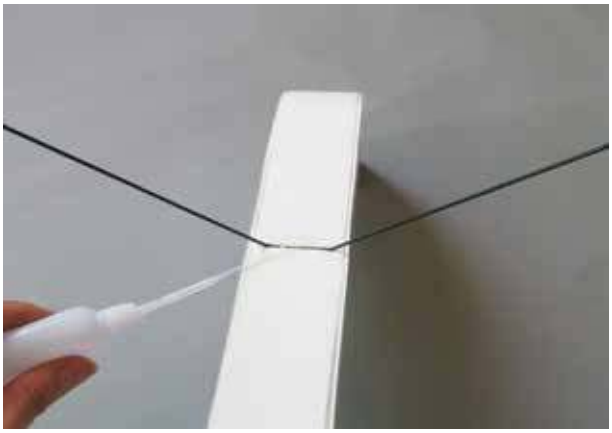


1. Connect servo extension leads to the elevator and rudder servo cables.

2. Feed the elevator and rudder servo cables through the inside of the fuselage.

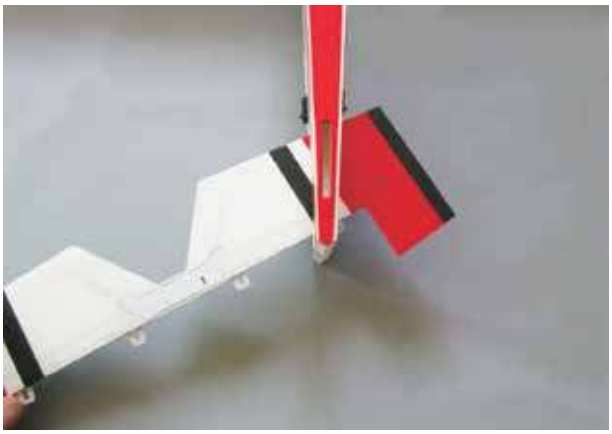
3. Install the rudder elevator and servos into the airframe.

4. Find the landing gear and install the wheels.



5. Insert the landing gear and landing gear plate into the landing gear slot in the fuselage and use thin CA glue to secure.

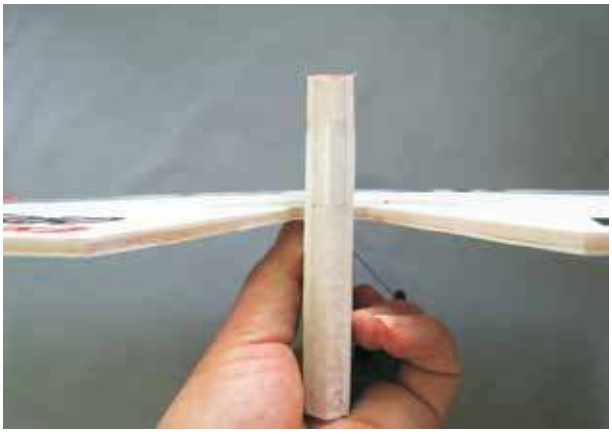
6. Carefully insert the wing into the fuselage. Measure to ensure that both front and rear of the wing are evenly spaced on both sides of the fuselage.



7. Carefully insert the elevator into the fuselage, noting that the elevator needs to be flipped upside down and back-to-front when inserted. Once it is fully inserted, you can flip it over.

8. Carefully insert the horizontal stabiliser into the fuselage. Insert the elevator hinges into the horizontal stabiliser. Measure to ensure that the horizontal stabiliser is evenly spaced on both sides of the fuselage.

9. Ensure that the distance on both sides between the main wing and the horizontal stabiliser is the same as shown.
Ensure that the horizontal stabiliser remains evenly spaced on both sides of the fuselage.



10. Ensure that the horizontal stabiliser and the main wing are parallel to each other and are at right angles (90 degrees) to the fuselage.
Use wedges if required.

11. Ensure that the main wing is correctly located and use thin CA glue to attach the wing to the fuselage.
Note: Do not use too much thin CA glue, as it might eat the polystyrene wing core.

12. Use a suitable foam glue to reinforce the wing to fuselage join on both sides top and bottom.

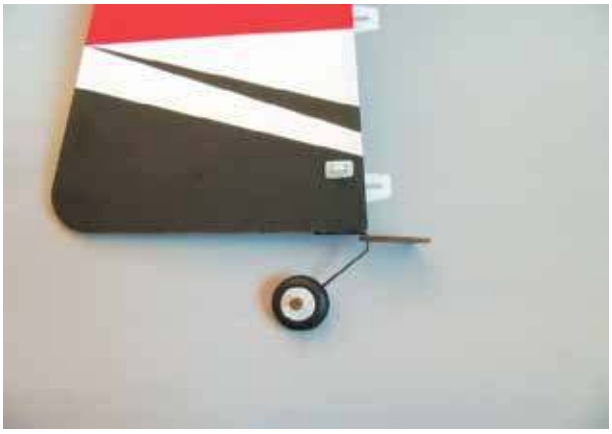
13. Use a small amount of thin CA glue to attach the horizontal stabiliser to the fuselage.
Note: Do not use too much thin CA glue, as it might eat the Depron foam core.

14. Use a suitable foam glue to reinforce the horizontal stabiliser to fuselage join on both sides top and bottom.

15. Adjust the elevator so there is a hinge gap of about 1mm and it is evenly spaced on both sides of the fuselage.
Use thin CA glue to attach the elevator hinges to the horizontal stabiliser hinge slots.

16. Use thin CA glue to attach the aileron and rudder control horns.
Install the control horn plate on the other side of the rudder.

17. Use thin CA glue to attach the elevator control horn. Install the control horn plate on the other side of the elevator.



18. Install the tail wheel as shown, ensuring that the tail wheel wood bracket can rotate on the wire.

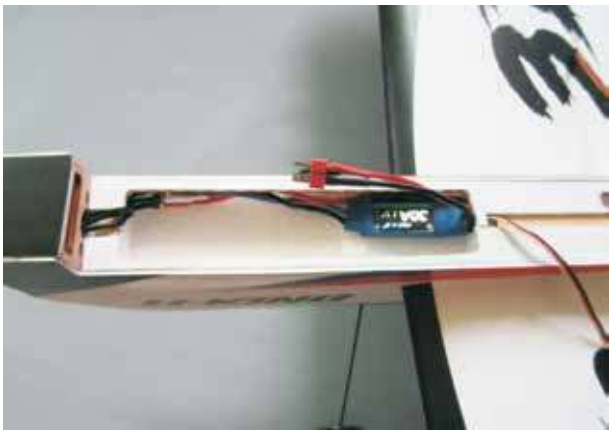
19. Insert the rudder hinges into the tail, leaving a hinge gap of about 1mm.
Adjust the height of the rudder so that the tail wheel can rotate freely. Use thin CA glue to attach the tail wheel wood bracket.

20. Ensure that there is a rudder hinge gap of about 1mm to allow it to movefreely. Use thin CA glue to attach the rudder hinges to the horizontal stabiliser hinge slots.

21. Insert the aileron hinges into the main wing, leaving a hinge gap of about 1mm. Use thin CA glue to attach the aileron hinges to the main wing.
Repeat for the other aileron.

22. Install the aileron servos and feed each servo cable end through the wing.

23. Install the motor using 4 wood screws. Ensure the motor rotates smoothly.



24. Install the electronic speed controller (ESC). Connect the motor to the speed controller.

25. Install the extended rocker arm asshown.

26. Install all ball heads as shown.

27. Setup the elevator linkages as shown.

28. Setup the rudder linkages as shown.

29. Setup the aileron linkages as shown.

30. Install a receiver. Connect all 4 servos and the ESC to the receiver. Turn on your radio and attach a battery to the ESC.
Note: Do not install a prop onto the motor at this moment until all the control surfaces have been well adjusted and ESC has been well calibrated.

SETUP TIPS & TRICKS

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, simply 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. I suggest your expo settings for full 3D will be 60% as a starting point. Adjust to your preference after flying.

MY PERSONAL SETTINGS:

I use a little trick where I put the stick at one third and set to where when I switch between rates the surface hardly changes. Obviously at the end points it is an enormous difference.

My personal expo settings for low rates is in the 20% range for an aerobatic plane and half that for a war bird, and in the 60% to 70% range for high rates for 3d and near 40% for warbirds. Again, this is highly dependent on the plane and this is a general guideline only, and is my personal preference.

HAVE A BLAST

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Made in China

Basic setup Quick Guide

This Quick guide is an easy way to develop a standard setup procedure guaranteeing accurate settings and a successful experience.

1. Basic Setup

- Servo Reversing. Just check the direction of movement, and reverse accordingly.
- Check that all servo arms are centered to 90 degrees.
- Sub trimming: Always sub trim to 90 degrees and mechanically center the flight control surface the best you can. Then sub trim to be perfectly centered.

2. Travel Adjust or endpoint adjustments

- 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, simply deflect it in the opposite direction and repeat the process.

3. Rates and Exponential Settings.

- The rates will accurately reflect the percentage of the full range of deflection after the travel adjust settings are correct. We must set at least 2 rates. High rates are full deflection (with more expo). And Low rates are usually in the 30% to 50% with little expo. I always take off and land on high rates in case of flight failures or in case I should need all I can get when flying slow.

- Exponential: With exponential you can make it so the stick movement at the center deflects very little and feel soft like low rates, and at the last part of the stick travel it deflects the surface dramatically. My personal settings are set to where I can hardly tell which rate I am on until I get the stick toward the end where the difference is dramatic. I use a little trick where I put the stick at one third and set to where when I switch between rates the surface hardly changes. Obviously at the end points it is an enormous difference.

My personal expo settings for low rates is in the 20% range for an aerobatic plane and half that for a war bird, and in the 60% to 70% range for high rates for 3d and near 40% for warbirds. Again, this is highly dependent on the plane and this is a general guideline only, and is my personal preference.

Note: JR exponential is set to + and Futaba is -. i.e. +60% or Futaba -60% to achieve the same result. Setting Futaba radio to a plus number will result in a dangerously sensitive condition and vise versa for JR.

— Michael Wargo