

# Backpack M2



Thanks for reading this manual before first use.

Thanks for having chosen an Opale-Paramodels product. We truly believe this remote-controlled paraglider is going to give you hours of enjoyment and will enable you to go through new outstanding piloting experiences. This user's guide content includes all the information you need to get your wing in flight and to ensure you will take good care of it. A good knowledge of your equipment will allow you to safely obtain most of its performances for your greatest pleasure! Thanks for giving this manual to the new owner in case you decided to sell your radio-controlled paraglider.

Best regards,  
The Opale-Paramodels Team

### Safety Information

You should be properly insured according to the country regulation you are using our equipment in.

You hereby accept the inherent risk of flying radio-controlled models.

Using our equipment in a bad way may increase risks. Neither Opale-Paramodels nor any other seller will be liable for any damage caused by any accident whatever the circumstances are. The way our equipment is used is incumbent upon the final user, including towards the law.

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## Warranty

The wing is guaranteed against any manufacturing defect.

If, while using, the pilot cut or damage a bridle, tear any part of the wing, repair and replacement of damaged parts are not taken in account by the warranty and the user will be charged for it.

## Frame composition



## Specifications

Dimensions: 29x29x29cm  
Minimum mass in order of flight : 1,3kg  
Maximal mass in order of flight : 3,5kg  
Materials : Aluminium / Steel / Plastic loaded with glassfiber  
Paint : Epoxy  
Wheels : 3 pouces / 76mm diameter  
Towpoint distance : 27cm  
Servomotors : 10kg.cm 40x20mm  
Motorization: Recommended power from 350 to 800W  
Propeller : 10 inches maximum

## Frame assembly

Mount the two pilot's fixations by mean of CHC M4-12 screws, rings and nut-lockings.



Position the prop-ring and the bracket of the wing, and fix the set by mean of the two CHC M4-30. Place on both sides of the frame the corresponding rings. Then fix the motor with its holder by mean of 4 CHC M3-25, and 4 rings and 4 M3 nut-lockings.

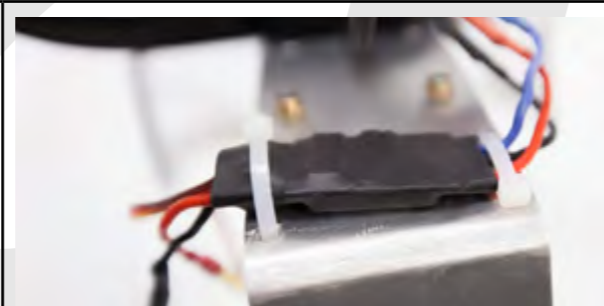


### Propeller mounting:

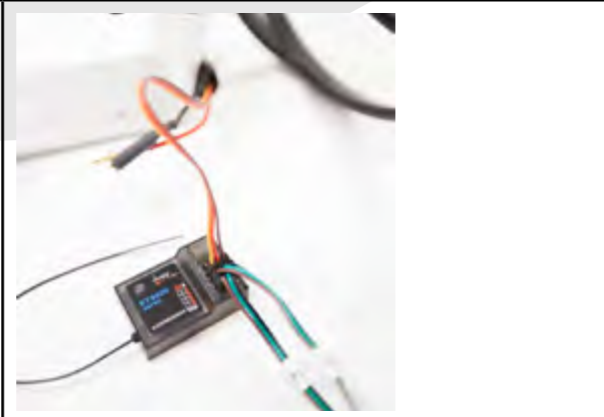
**The leading edge (rounded part) of the propeller must be directed to the front of the frame. The cutting side must be directed to the rear. An incorrect mounting decrease the thrust by 70%!**

**Tip: Logo or propeller reference must be directed to the front.**

Fix on the low part of the main platinum the speed controller by mean of two plastic beads. Connect it on the motor as indicated on the manual included with it.



Connect the controller cord onto your receiver (here: the receiver of your 4 channel Remote-Controller) on the gas channel (ch 3). Then, plug the connectors of the mixer for RC paramodels of your pilot onto the aileron channel and depth channel (here: ch1 & 2)



To connect and use the mixer for RC paramodels, please refer to the following video tutorial:  
<https://youtu.be/P2njCNCTudU>



Install the ballast into your pilot, in fact of the harness (modulate the ballast quantity according to the wing size and the weather conditions of the day).



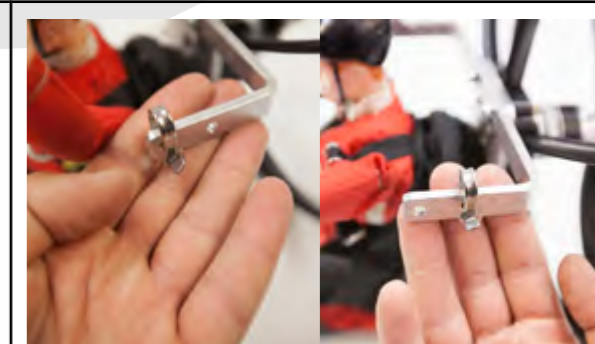
Insert the battery so the receiver and the mixer in the rear part of the harness. Close the whole.



Install the two rubbers in order to lock the pilot on the frame.



Install the Inox buckles to connect the wing to the frame. The choice of the inox buckle location is done according to the frame angle while this one is maintained by the wing.  
In the case the frame is nose down, you must put the inox buckle to the front.  
If this one is nose-up (beyond 5°), you must position the inox buckle to the rear.  
Inox buckles must be located at the same place.



## Servo Holder Assembly (option)

<p>Unassemble the two fixation pilot parts.</p> <p>Prepare the servo holder plate by installing 4x CHC M3-8 screws and nuts</p>	
<p>Mount the glassfiber arms on the servo horns by using 2x cruciform M2-8 screws. Do the same for the 2nd servomotor.</p>	
<p>Prepare the two pilots fixations with 4x CHC M4-40 screws and M4 washers</p>	
<p>Put in place the servomotors and the two fixations on the plate</p> <p>Lock the 4x CHC M4-40 screws on the main backpack plate with 4x M4 nuts.</p>	
<p>The Backpack is now ready with the servo holder Kit. Please use the provided rubbers to lock the lipo battery on the backpack.</p> <p>For the servomotors settings:</p> <ul style="list-style-type: none"> <li>- in neutral position (without Paramodels mixer), the arms have to be horizontal.</li> <li>- with the arms at up position (with Paramodels mixer ON, elevator stick neutral) the arms have to be 45° up.</li> </ul>	

## Landing Gear Assembly (option)

<p>For each of the 3 inches wheels, pierce the passage axis with a drill from 5 to 5,5 mm diameter. For the two rear wheels, position a CHC M5-45 screw.</p>	
<p>Lock the screw by mean of a M5 nut-locking. Do not completely tighten it, in order to let the wheel rotate free.</p>	
<p>Fix the axis on the rear gear by mean of a second M5 nut-locking. Repeat the same operation for the opposite wheel.</p>	
<p>For the front gear preparation, shorten with a cutter the two spacers, from 1 to 2 mm.</p>	
<p>Insert the CHC M5-45 screw and the first spacer. Insert the wheel inside, place the second spacer, and lock the set by mean of a M5 nut-locking.</p> <p>Mount the front gear on the frame and fix it by mean of 4x CHC M3-10 screws and M3 nut-lockings.</p>	
<p>Remove the fixation beads of the speed controller. Arrange then the rear landing gear and fix it by mean of 4x CHC M4-12 screws and M4 nutlockings. The speed controller can be fixed again on the rear landing gear.</p>	

## F.A.Q. Questions / Answers

### My RC paramotor seems not to move forward very fast. How to remedy this problem?

If your model advance a little bit, or if it even stays on-the-spot, it is because your model is too light. In that case, you have to land and increase the weight with additional ballast or batteries until you obtain a 5 to 10 km/h with regard to the ground.

### How do I know if the brakes bridle are adjusted correctly?

Brakes bridle are perfectly adjusted when the trailing edge is completely loose while flying, with the depth stick pushed up. Also, as soon as you push laterally of some millimeters the aileron stick, the trailing edge must begin to fold immediately. Otherwise, you must shorten centimeter by centimeter until you obtain an immediate control. It is a matter of the RC paramotor stability. The "Two inflating" method let perform a correct adjustment in 80% of cases. Think of it!

### How do I know if the wing is correctly connected to the backpack?

When holding the model by the backpack/pilot, wing downwards, none of the bridle must cross, or turn around another bridle. Otherwise, you will have to untangle your wing. Before first flight, check the tightening of your inox buckles.

### In what sense is it necessary to mount the propeller?

To obtain a maximal thrust, the propeller leading edge must be directed forward the backpack. It is easy to recognize the leading edge, because it is the bulged portion and non cutting side of the propeller. The trailing edge must be directed backwards. It is the cutting part of the propeller.

Generally, propellers have a logo or a marking. It is most of the time put on the leading edge.

### How to inflate correctly his RC paramotor wing?

To inflate correctly his wing, it is essential to face it to the wind, at a sufficient distance from any obstacle. (generally 300m). Maintain your backpack at the basis and give a dry horizontal pulse while accompanying the rise of the wing. Throw smoothly the backpack straight away with a 50% engine speed.

### I broke a bridle. How can I replace it?

The bridle can be replaced easily by following the splice method described in this manual.

### My wife is fed up with looking at me sleeping with my RC paraglider. What can I do?

This is a very complicated situation at first sight. Nevertheless, two solutions can solve this problem. At first, you can lend her your credit card during sales period, or, in a second time, ask her for a friendly divorce. (But prefer the first solution, your RC paraglider's custody is in the game!).

### There is a hole in my wing. How can I fix it?

A hole can be fixed in a few minutes thanks to the adhesive tissue provided with your wing. Follow the instructions described in this manual at the previous chapter.

### Why my wing doesn't inflate, even when facing to wind?

If the wing doesn't inflate even when facing to the wind, the brakes bridle adjustment is too short. In that case, extend them centimeter by centimeter then perform again the "two inflating" method, to ensure the control at first take off.

### Is it possible to replace the risers ?

A riser can be replaced easily. Contact your Opale Paramodels dealer to obtain the correct reference

### Is it possible for the RC paramotor wing to take away some material for shooting/FPV? Until which mass?

Each wing has a maximal takeaway capacity. Check the model total weight and compare it with the wing's take away capacity. You will obtain the payload value, compatible or not with your equipment. Be careful, if you make your paramotor strongly heavy, think of a more powerful motorization, by keeping a 150 W motor ratio / Kg of complete model

## F.A.Q. Questions / Answers

### Can I fly anywhere with my wing? Is it a danger for the goods and the people?

You can't fly anywhere with your wing. To practice aeromodelling, you must own a third-party insurance and practice on a ground with the owner's agreement. Ideally, contact your aeromodelling federation. It is forbidden to fly in an urban zone and close to the houses. This type of model is not light, it can causes heavy physical and material damages. Use it carefully and without going above your limits.

### Until which height can I fly the wing?

In order to not disturb aerial traffic, maximum authorized height is about 150m from the ground. Contact your federation and the organism of aerial traffic management of your country to have reliable information about it.

### Is it possible for my hamster to fly my RC paramotor? Which precautions to take?

Check if your hamster is solidly attached to the backpack. The wear of a helmet and flysuit is advised. If you perform several 360) and wingovers, think of install under the batteries, a little plastig bag near its paws with few menthol candies.

### Can I do another use of the paramotor wing?

This wing can be used for slope soaring without backpack. In that case, you will have to attach a pilot as real paraglider discipline

### Is it possible that the wing deflates while flying? Which behavior to adopt in that case?

If your wing deflates while flying and begin to reverse, it is because you have too much requested the brakes. To remedy this phenomenon, slacken gradually the radio sticks and think of cutting the throttle.

### Is it important to untangle correctly the bridle before flying? How can I do? I am lost with all those strings!

It is essential to untangle well the bridle. If not, you can strongly distort the flight characteristics of the wing. To untangle all the bridle fastly, drop the wing out of the backpack. Hold the riser by the endpoint and seize one by one the bridle around the principal bridle package Always take first the most distant bridle

### My wing is caught in a thermal and gets altitude. What can I do to regain control?

This scenario is usual when convection conditions are present. In that case, no panic. Relax and maintain a trajectory as rectilinear as possible to fastly go out of the thermal.

### How can I maintain and clean my wing?

If you made your wing dirty, you can clean it with a wet cloth. You can rinse it with clear water as well. Never use chemical products! The tissue could be hardly damaged. Think of tidy your wing in a dry place, shielded from UV and humidity.