

# F\*RACE Pilots Manual EN







# THANK YOU

Thank you for choosing Ozone.

The F\*Race is an ultra-lightweight XC pod harness designed specifically for the X-Alps race, high performance hike and fly, and serious back country adventure flying. The F\*Race is a totally new design, using the knowledge and experience gained from many years of intense vol-biv flying and several editions of the X-Alps race and incorporating that with the ultra lightweight F\*Lite design concept to create an incredibly light race harness.

As a team of free flying enthusiasts, competitors and adventurers, Ozone's mission is to produce paragliding equipment of the highest quality using cutting edge designs and the best technical materials available. Our development team is based in the south of France. This area, which includes the sites of Gourdon, Monaco and Col de Bleyne, guarantees us more than 300 flyable days per year. This is a great asset in the development of the Ozone range. We know that quality and value for money are essential considerations when choosing equipment, so to keep costs low and quality high we build all our wings and harnesses in our own production facility. During production all Ozone products undergo numerous rigorous quality control checks. This way we can guarantee that our equipment meets the same high standards that we expect ourselves.

If you need any further information about Ozone, the F\*Race, or any of our products please check www.flyozone.com. Or you can contact your local dealer, paragliding school or any of us here at Ozone.

It is essential that you read this manual before using your harness for the first time.

Safe Flying!

Team Ozone





# **WARNING**

- Paragliding is a potentially dangerous sport that can cause serious injury including bodily harm, paralysis and death. Flying an Ozone harness is undertaken with the full knowledge that paragliding involves such risks.
- As the owner of an Ozone harness you take exclusive responsibility for all risks associated with its use. Inappropriate use and or abuse of your equipment will increase these risks.
- Any liability claims resulting from use of this product towards the manufacturer, distributor or dealers are excluded.
- Be prepared to practice as much as you can especially ground handling, as this is a critical aspect of paragliding. Poor control while on the ground is one of the most common causes of accidents.
- Be ready to continue your learning by attending advanced courses to follow the evolution of our sport, as techniques and materials keep improving.
- Use only certified paragliders, harnesses with protector and reserve parachutes that are free from modification, and use them only within their certified weight ranges. Please remember that flying outside of certified configurations may jeopardise any insurance (e.g. liability, life etc) you have. It is your responsibility as the pilot to verify your insurance cover.
- Make sure you complete a thorough daily and pre-flight inspection of all of your equipment. Never attempt flying with unsuitable or damaged equipment.
- Always wear a helmet, gloves and boots.
- All pilots should have the appropriate level of license for their respective country and third party insurance.
- Make sure that you are physically and mentally healthy before flying.
- Choose the correct wing, harness and conditions for your level of experience.
- Pay special attention to the terrain you will be flying and the weather conditions before you launch. If you are unsure do not fly, and always add a large safety margin to all your decisions.
- NEVER fly your glider in rain, snow, strong wind, turbulent weather conditions or clouds.
- If you use good, safe judgment you will enjoy many years of paragliding.
- Respect the environment and look after your flying sites.
- If you need to dispose the wing, do so in an environmentally responsible manner.
- Do not dispose of it with the normal household waste.

## Remember, PLEASURE is the reason for our sport!





# YOUR F\*RACE

The F\*Race is an ultralite vol-biv harness for pilots on serious backcountry missions. Designed for the Red Bull X-Alps, it is uncompromising in its lightness. At just 1.4kg total weight, with pod, cockpit, and back protection, this is the most competitive full-featured ultralight XC harness available today.

With a full cocoon, fairing, cockpit, and integrated ventral rescue container, the F\*Race is slick and low-drag. The harness structure is comfortable and easy to configure, with two lumbar adjustments and excellent back support. A bucket seat design has been engineered using the F\*Lite Dyneema thread distribution pattern. Nitinol adds rigidity to and support to the upper torso area.

The F\*Race features a passive inflatable protection, which is highly efficient. It achieved a 25G impact rating in all tests, well below the certification requirement. This inflatable protection covers the entire seat and back areas. The rear fairing not only provides aerodynamic performance, but also increases impact protection.

Critical to any vol-biv effort is the capacity, ease of use, and comfort of the equipment storage option. With extensive input and testing by legendary vol-biv expert, Antoine Girard, the F\*Race provides a large storage volume in addition to the excellent protection, meaning that you can have it all: Storage, Protection, Comfort, and Aerodynamics. Extensive pockets, including for in-flight use: A left side storage with safety clip anchors for gear, a pocket under the rescue container, a back hydration pocket with tube channel, functional instrument cockpit, and a second removable cockpit with large storage pocket.

The leg straps can be fully opened, with easy to use toggle buckles. Gearing up is simple, with all of the attachment points and adjustments easy to find. After a 1500m ascent, you want a simple and intuitive gear-up process.

The final production F\*Race is vastly improved over the X-Alps version. Within 50 grams of the original weight, the production version is more durable, far more comfortable (thanks to the new bucket seat design and nitinol structure), much better protection, incredible packability, and more.











# **PREPARATION**

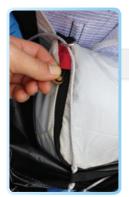
## **WUNDER-SEAT PROTECTION REMOVAL/INSTALLATION**

The F\*Race features a certified EN/LTF/CE inflatable under seat protector. Cleverly designed, it offers excellent impact absorption properties despite the low weight and volume. The protection is in place upon delivery, but requires inflating before use. Should you need to remove it or replace it please follow the instructions.



The protection is located in the pocket found under the seat, to remove the protection from the harness first you need to remove stopper from the inflation pipe found in the main rear pocket. Unlock the stopper and slide it off the pipe.





Open the pocket found under the seat and with the protection deflated, remove it whilst feeding the pipe through the hole from the rear compartment.





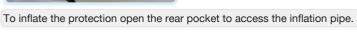




## **WUNDER-SEAT PROTECTION INFLATION**



The protection is inflated by hand using trapped air inside the supplied special stuff sack.







Make sure the stopper is in the open position and attach the inflation pipe to the outlet found on the stuff sack.









Close off the top of the stuff sac by rolling it tightly in the hands to trap the air inside and push/squeeze so the air is transferred into the protection.





Once the protection is fully inflated - to the point at which you cannot easily add any more air using the stuff sack - close the inflation pipe stopper. For the optimum level of protection and comfort, a small amount of air needs to then be released: to do so, open the stopper for a maximum of 2 seconds before closing again. Do not apply any extra pressure on the protection whilst doing so.

Ensure the underseat pocket that contains the protection is fully and completely closed with the zip located neatly in the red retainer. This is an essential part of the safety and impact absorption of the harness. Failure to do so will make the protection less effective.

**IMPORTANT:** Ensure the inflation pipe stopper and the underseat zip are fully closed. Failure to do so will result in the protection not functioning correctly.

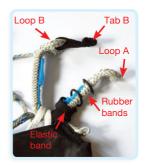
**IMPORTANT:** It is not necessary to overfill the protection, doing so will make the harness less comfortable. Ozone recommends to inflate fully using the stuff sac, and then to release a small amount of air by opening the stopper for a maximum of 2 seconds.





## **CONNECTION TO THE WING**

Connect the F\*Race to the risers of the wing using the integrated Link Lite connectors at the main hang points as follows:









Pass loop A through loop B



Secure Tab B with rubber bands Secure Tab B with elastic band





Pass Tab through loop A



**IMPORTANT:** 

harness.

are no other suitable attachment points to

attach the risers to the

There



## SPEED SYSTEM

A lightweight integrated speed-line is included as standard. The speed system is already installed by the factory but if you ever need to replace it, ensure it is routed as follows.

Route the free end of one of the lines down through the small reinforced slit found on the side panel of the harness.



Pass the line through the Ronstan pulley and then the ring ensuring the pulley is not twisted. Ensure that the lines run cleanly through the pulleys and pass on the inside of all structural webbing straps. Double-check the lines have not inadvertently wrapped around any of the structural webbing straps before attaching them to the bar. The bar can then be joined with the bungees attached to the footplate

Once in the air, and when it is safe to do so, check that you can place your foot on the bar easily and that the system operates smoothly all the way to full speed.

IMPORTANT: The speed bar lines must be of equal length, ensure they are not too short as this will inadvertently activate the speed system when under tension in the air. Always double-check lengths and symmetry whilst on the ground before flying.





## RESERVE PARACHUTE INSTALLATION

The F\*Race has an integral front mounted reserve parachute container. The container is certified for parachutes with a volume of between 3 and 5ltr, and will accept the Angel SQ pro and most modern lightweight rescue parachutes. We have tested it with the Angel SQ 120 which fits, it will also just accept the Angel SQ 140 - but it is a very tight fit. We recommend to use a smaller lightweight parachute with a small packing volume.

WARNING: Ozone strongly recommends that the reserve parachute system is installed by a qualified professional. Always seek experienced advice if you have any doubts.

Make sure you perform a practice throw from a static hang point. Not only does this ensure the correct functioning of your deployment system it also allows you to become more familiar with the installation process.

Please note, the parachute handle is on the right hand side of the container and should be thrown with the right hand.

The F\*Race does not have a dedicated reserve parachute deployment bag, use the one supplied with your parachute. The parachute should be packed in such a way that it matches the shape and dimension of the front container. Attach the deployment handle using a Larks foot to the exterior loop of the deployment bag. Do not use the central loop.







Ensure the harness bridle is correctly routed into the reserve compartment as shown.



Please note, the F\*Race is only suitable for reserve parachutes with a short bridle.

Attach the harness bridles to the parachute's bridle using a suitable connector and secure the ends with elastics (not supplied). Alternatively, the parachute bridle can be attached directly to the harness bridles with a Larks foot to save weight.



Ensure the parachute container zip is positioned fully to the right hand side - where the bridle enters the container. Feed the handle through the gap and place the deployment bag neatly within the container. The parachute lines should be positioned underneath the parachute.





## DZONE



Now the 3 yellow pins need to be threaded through their respective loops. Start with the pin that feeds towards the rear of the harness. Each pin must go through the loops in the correct order, with the red loop first. Once the red loop and 3 smaller black loops have been threaded, place the pin in the end retainer loop.





Use the same procedure for the pin that faces towards the front of the harness. Once the first couple of loops are done, close the zip slightly to make it easier to thread through the remaining loops.









The third pin follows the direction of the harness bridles. After the first couple of loops are in place pull the zip so that the remaining loops can be threaded.





Before placing the pin in the end pocket, position the handle under the pin to keep it neatly in place. Finally the pin can be placed in the end pocket.



The parachute container and bridle compartment zips can now be closed fully. Make sure the zips are fully closed and located in their respective end compartments. Failure to do so will result in inadvertent unzipping.





# **FITTING**

Before your first flight, we recommend to suspend the harness from a suitably strong point to check that it fits you correctly and to become familiar with the features and adjustments. You can set the shoulder adjustment-straps to find the best fit, and adjust the lumber support so that they leave you in a comfortably reclined position.

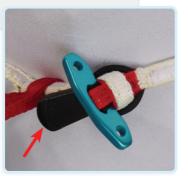


To put the harness on first place the shoulder straps over your shoulders. The leg straps fasten with the T lock buckles, coloured coded for each side. Slip the T lock completely through the loop and secure in place with the elastic loop.









**IMPORTANT:** Ensure the elastic loop is correctly in place. Failure to do so could result in the leg straps coming undone.





The shoulder retainer strap can be done up by passing the red ball through the loop.



The pod closing system should now be connected. First attach the male buckle of the left hand pod to the female buckle located on the structure on the right hand side (blue tags). For the right hand side loop the red anti forget buckle through the red loop on the parachute container before attaching it to the red female buckle located on the left pod.















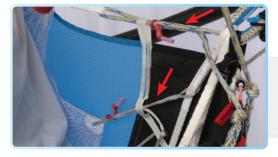
# **ADJUSTMENTS**

#### SHOULDER STRAPS

The length of the Shoulder straps can be modified using the splice adjustments. Adjust the shoulders whilst standing up with the harness on so that they are comfortably snug. Whilst suspended in the seated position ensure the straps are comfortable and supportive. To tighten the shoulder straps pull t the grey cord from the knot towards the front of the harness. To loosen, pull the Aramid tag in the same direction.







#### **CUMBER SUPPORTS**

There are two lumber supports so that an optimum flying position can be found. Precise adjustments can be made in the air so that your lower back is completely supported and there is no tension in your stomach muscles. Adjustment is made using the splice adjusters in the same way as the shoulder straps. Be sure to adjust the lumber supports carefully, setting the upper adjustment too loose will result in a very reclined position in the air.

#### LEG SUPPORT ANGLE / FINE TUNING OF THE POD

Minor adjustments to the angle and overall length of the pod can be made using the splice adjustments. The angle of the foot plate can also be changed by moving the relative positions of the splices.







# **FEATURES**

#### **INTEGRATED COCKPIT**

The F\*Race is supplied with an integrated flight deck as part of the parachute container. Instruments can be attached directly to the deck. In addition there is a separate cockpit for larger instruments and an extra storage pocket. This fits between the pilot and the parachute container and is attached to the structure using the small clips located near the main hangpoints.



#### **WHYDRATION ACCESS SYSTEM**

The F\*Race includes a hydration access system with an integrated pocket in the main rear pocket, an opening on the left hand side and shoulder anchor points for your hydration tube.



#### **VELCRO SHOULDER MOUNT**

On the opposite shoulder strap, there is a lightweight Velcro mounting point for a small vario, tracking device or a radio.





## **WALKING POLE STRAP**

Walking poles can be secured in the rear pocket with the retainer strap.





## **STORAGE POCKETS**

The F\*Race features a large rear pocket and side pocket. In addition there is extra storage space under the parachute container and within the cockpit.











# **USE AND MAINTENANCE**

## PRE-FLIGHT CHECKS

Before take off it is important to carry out a thorough pre-flight check.

- Ensure the parachute pins are correctly in place and the zips around the parachute container are closed
- Visual check of structural webbing looking for any obvious damage
- Visual check of the Link Lite carabiners ensuring they are correctly mounted with elastics in place and no signs of fatigue or damage.
- Risers connected correctly to the carabiners without twists
- Speed system attached and not tangled around the webbing
- Leg / Chest strap T locks done up correctly with the elastic bands in place
- Double check your leg straps

#### *◯* PARACHUTE DEPLOYMENT

If you are in the unfortunate situation of needing to throw your reserve, do so with conviction:

#### Look; Reach; Pull; Throw.

- Look at the handle, grab it and pull so the retaining pins are released. The parachute can only be thrown with the right hand.
- Pull out the deployment bag, it is best to pull towards the outside so that the parachute extracts sideways from the pocket, pulling the handle upwards may not allow the parachute to release. Know your equipment and adapt your technique accordingly.
- Throw the parachute away from you as hard as you can into clear space, not towards your wing. It is important at this stage to remember to LET GO of the handle. Aim to throw with the direction of airflow to aid a fast opening and against the direction of rotation.
- If after throwing the parachute does not deploy (possible in low energy emergencies e.g. parachutal stall), grab the reserve bridle and give it a strong pull. This will help encourage the parachute to open faster.
- As the parachute deploys, the next stage is to concentrate on disabling the paraglider. There are several ways to do this B line stall; rear riser stall; gathering the canopy by working up the A lines until you have the material in your hands or using the brakes to stall the wing. The best technique depends entirely on the situation. The most important thing to remember is to completely disable the wing so that it does not act against the parachute and cause a down-plane. Whichever method you choose do so symmetrically, you do not want the paraglider to start rotating, this could cause the paraglider to fly into and effectively disable the parachute.
- Due to the position of the reserve bridle hang points on most harness, deploying the reserve parachute tends to automatically put you in to the PLF position (legs down), if you are not, do everything you can to get yourself into this position so you can absorb the landing impact with your legs.
- Always use a PLF when landing under emergency situations or under a rescue parachute.





#### **WATER LANDING**

After a water landing you should remove the reserve parachute, under seat protection and foot plate and allow to dry. If you land in salt water it is necessary to thoroughly clean the harness and all parts with fresh clean water ensuring that all traces of salt are removed. Before reassembly make sure that the harness and all components are completely dry.

IMPORTANT: In the case of a water landing, the natural buoyancy of the back protection and rear section can cause the pilot to be turned face down in the water. It is recommended to immediately undo all straps and swim away from the harness taking care to not become entangled within the lines.

## **TOWING**

The F\*Race is not suitable for towing.

#### **EXTERNAL PARACHUTE CONTAINER**

An additional parachute container cannot be added to the F\*Race.

## **CARE**

The F\*Race is a no compromise lightweight race harness and must be used carefully. To keep your harness clean and airworthy, please note the following:

- Avoid excessive exposure to UV, heat and humidity.
- Pack the harness dry and store in a cool dry place.
- Never drag your harness, especially when landing.
- Keep you harness clean of dirt and away from any oils or other corrosive substance.
- Use water and a cloth to clean.

## **INSPECTION**

For safety, routine inspection of all of your equipment is vitally important. Ozone recommends a service interval of 12 months in addition to the usual pre flight checks. For inspection, visually check the stitching, webbing and all structurally important areas. Pay particular attention to the webbing around the hang point area under the Link Lite carabiners, as this is where abrasion is most likely. If you find any damage or if you are in any doubt make sure the harness checked by a professional.

#### **DISPOSAL**

When the harness comes to the end of its useful life, remove all metal parts and dispose the rest in an environmentally friendly manner.





# **OZONE QUALITY GUARANTEE**

At Ozone we take the quality of our products very seriously. Our harnesses are made to the highest standards in our own manufacturing facility. Every harness manufactured goes through a stringent series of quality control procedures and all the components used are traceable. We always welcome customer feedback and are committed to customer service. Ozone guarantees all of its products against manufacturer's defects or faults. Ozone will repair or replace any defective product free of charge. Ozone and its distributors provide the highest quality service and repair, any damage to products due to wear and tear will be repaired at a reasonable charge.

If you are unable to contact your dealer then you can contact us directly at info@flyozone.com.

## Summary

Safety is paramount in our sport. To be safe, we must be trained, practised and alert to the dangers around us. To achieve this we must fly as regularly as we can, ground handle as much as possible and take a continuous interest in the weather. If you are lacking in any of these areas you will be exposing yourself to more danger than is necessary.

Every year many pilots get hurt launching; don't be one of them. Launching is the time that you are most exposed to danger so practice it lots. Some launch sites are small and difficult and conditions aren't always perfect. If you're good at ground handling you'll be able to confidently and safely launch whilst others struggle...practice as much as you can. You'll be less likely to get hurt and more likely to have a great day's flying.

Respect the environment and look after your flying sites. When the harness comes to the end of its useful life, remove all the metal parts and dispose the rest in an environmentally friendly manner.

Finally, RESPECT the weather, it has more power than you can ever imagine. Understand what conditions are right for your level of flying and stay within that window.

Happy flying & enjoy your F\*Race. Team Ozone





# TECHNICAL SPECIFICATIONS

	S	IM	L
Weight (kg)	1.4	1.5	1.7
Recommended pilot height (cm)	<175	170-185	>185

Weight includes all standard options: Back protection, carabiners and rescue bridles.

## **MATERIALS**

Harness Outer fabric

Dominico 40D / 70D Porcher 27g Lycra

## Main webbing

Technisangle 7 Edelrid Dyneema Taurus line

# Reserve parachute Bridles

Dyneema 6mm

#### **Buckles**

T Lock toggles

#### **Carabiners**

Link Lites

70D

CERTIFICATION

The F\*Race is certified EN 1651:2017 and LTF with a maximum load of 100kgs. In addition, the inflatable under seat protection is certified to the CE standard by CRITT (France).







1258 Route de Grasse Le Bar sur Loup 06620 France

Inspired by Nature, Driven by the Elements