



# SWITCH

Pilots Manual EN

# SWITCH

RADICALLY VERSATILE

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## THANK YOU

Thank you for choosing Ozone.

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 Switch, or any of our products please check [www.flyozone.com](http://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 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 in rain, snow, strong wind, turbulent weather conditions or clouds.
- 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 SWITCH

The SWITCH\* is a versatile harness designed for speed flying, speed riding, and hike & fly. Modular and reversible, it is fully-featured for pilots who want options.

The hybrid design, with split leg & bucket seat combination offers comfortable support and precise piloting. It is a smooth transition from running, kiting, or skiing, to seated flight. Easy-access side pocket, an out-of-the-way speed bar system, and the durable two buckle closure make it clean and easy to use.

### **Modular:**

- Removable ultralight back protection
- Sleek & compact speed flying mode
- Full featured reversible backpack in speed riding / flying mode
- Optional Paragliding module with back protector & under-seat reserve

### **Speed Flying Mode** - speed flying/riding/hike and fly

When you want a compact and sleek harness for speed flights, or high mountain descents, zip off the back protector and reserve compartment for a low profile and comfortable configuration.

### **Paragliding Mode** - paragliding soaring/hike and fly

The optional Paragliding module adds an ultralight inflatable under seat protector and reserve compartment making the SWITCH an ideal choice for extended soaring flights, or any application where there added security of an integrated reserve parachute and under seat protector is desired. The protector is inflated with air using the special inflation bag, allowing quick and easy setup with excellent impact protection.

### **The Backpack**

With ski / snowboard carry system, compression straps, hydration access, and a comfortable and ergonomic support frame, the SWITCH pack is a joy to carry. The reserve compartment is secure while in pack mode, but allows easy extraction in the case of a reserve deployment. In flight, the back storage compartment can be compressed via zipper to reduce the storage profile when desired.

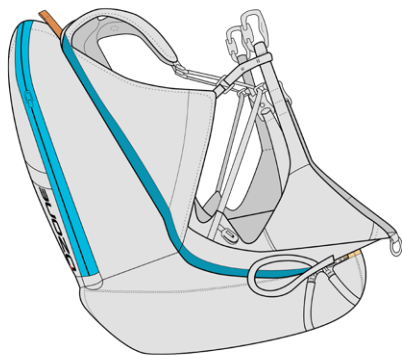
\*Suitable for solo flying only.



# ANATOMY OF THE SWITCH







## WHERE TO FIND YOUR ZIPS AND SLIDERS: PART 1

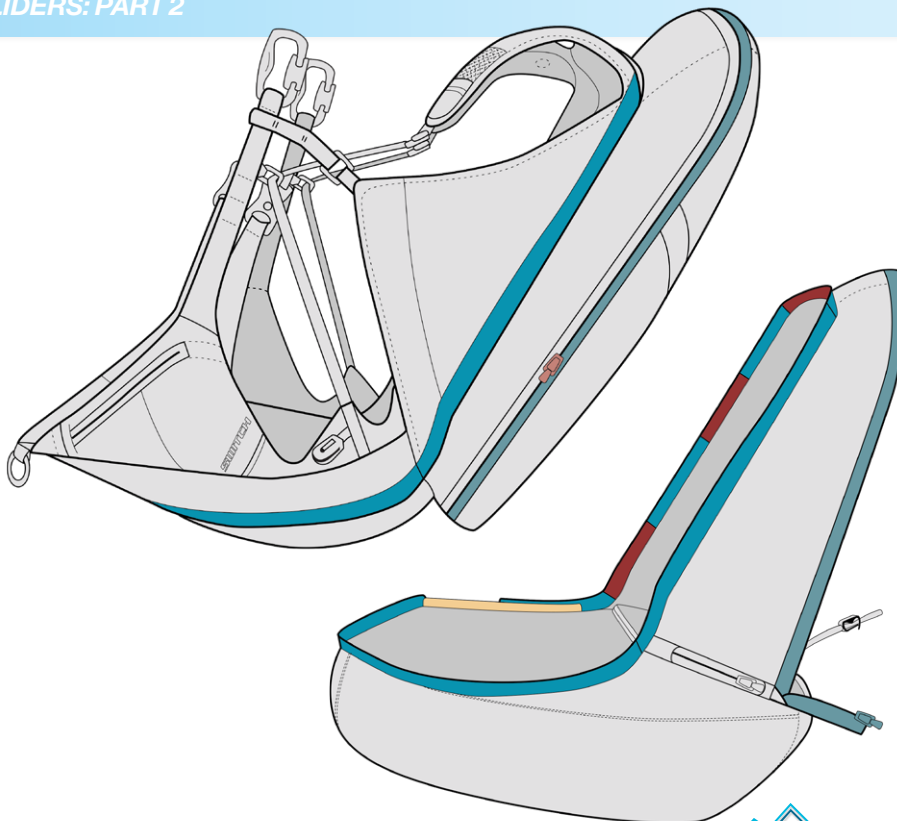
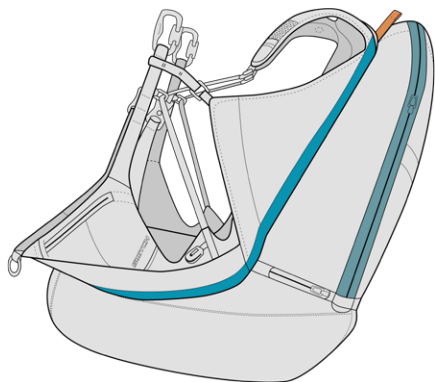
- Slider A / Zip 1
- Slider B / Zip 2
- Slider E / Zip 3
- Velcro
- Slider C
- Shoulder Attachments



# ANATOMY OF THE SWITCH

WHERE TO FIND YOUR ZIPS AND SLIDERS: PART 2

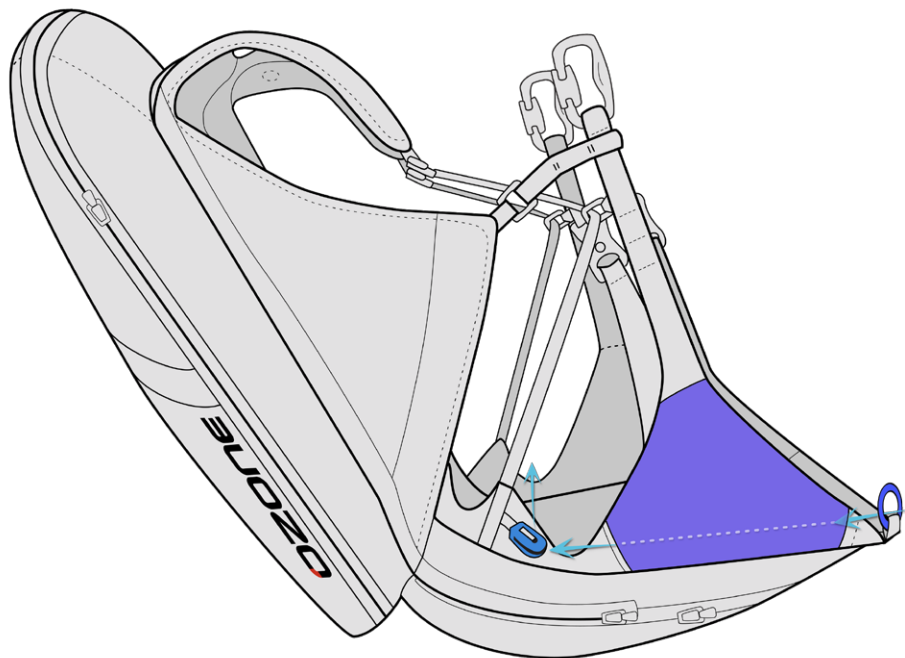
-  Zip 1
-  Zip 2
-  Slider F / Zip 4
-  Velcro
-  Slider D
-  Shoulder Attachments



## SPEED SYSTEM

WHERE TO FIND SPEED SYSTEM FITTINGS

- Ronstan Pully
- Metal Ring
- Protective Sleeve



## PLACING YOUR SPEED SYSTEM

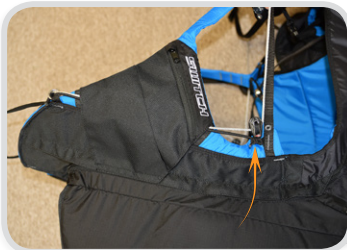
A lightweight integrated speed system is included as standard. If your wing does not have a foot operated speed system we recommend the lines and bar are removed from the harness structure. If you ever need to replace the system follow these steps.



Feed the speed bar line through the metal ring and the opening of the protective sleeve - use a piece of plastic or magic line to pull the line through the protective sleeve. Then pass the line through the Ronstan pulley.



Do the same with the elastic bungee and tie to the pulley attachment loop using a suitable knot.



Attach the bar to the speed line and bungee using suitable knots. 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 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.



## FITTING / ADJUSTMENTS

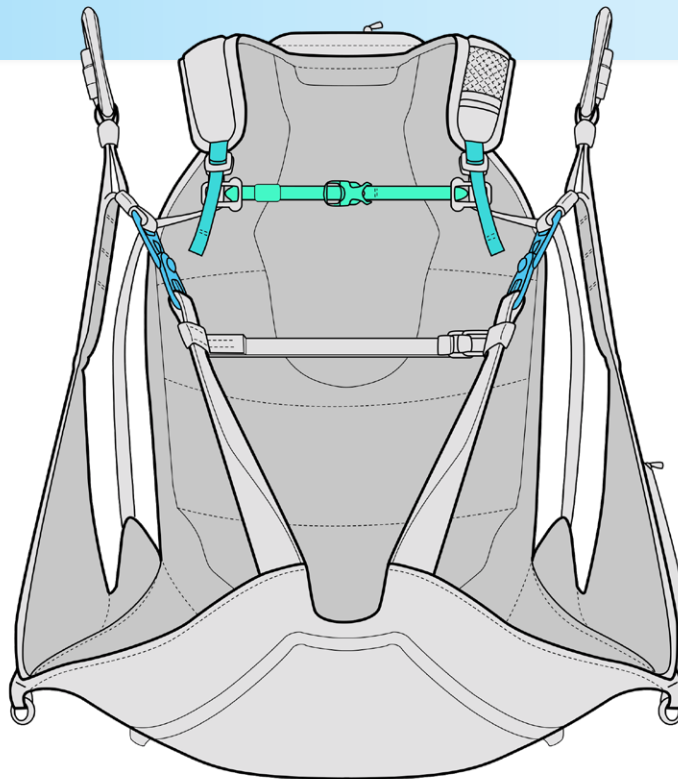
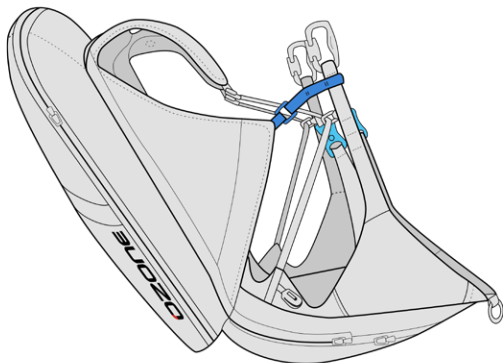
WHERE TO FIND YOUR ADJUSTERS

Shoulder Strap Retainer Clip

Shoulder Strap Adjusters

Leg and Chest Strap Click Buckles

Lumbar Support





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 lumbar support so that they leave you in a comfortably reclined position. Fine tuning can then be made during your first flights to find the perfect set up for you.

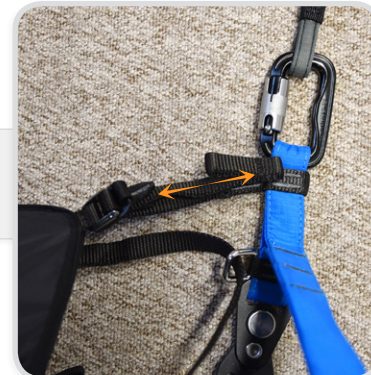
### **SHOULDER STRAPS**

The length of the Shoulder straps can be modified using the adjustment straps. 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, they should not be too tight nor too loose.



### **LUMBAR SUPPORT**

The Lumbar support should be adjusted for a comfortable flying position. 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. Be sure to adjust the lumbar supports carefully, setting them too loose will result in a very reclined position in the air.





### **LEG STRAPS / CHEST STRAP**

Fasten the leg/chest strap with the click buckles. The red button must be depressed to close and open the buckles. Slot the circular hole over the silver boss so that the red button is depressed and then slide the buckle backwards. The red button will pop up, the buckle is then locked in place.

Ensure the buckles are closed properly, the red button should be up and the female buckles pulled fully so they are seated within the slots.



To undo the buckles first depress the red button and slide the buckle forward.

The length of the leg straps have been carefully set and cannot be adjusted. For maximum weightshift the chest strap should be set to the widest position. For greater roll stability the straps can be tightened. It is important to test fly and adjust to find the position that is best for your style of flying and overall comfort.





### SHOULDER STRAPS

The shoulder strap retainer clip should now be fastened.

### REAR POCKET ADJUSTMENT

The rear pocket can be enlarged in the speed flying mode by undoing Slider C and D from Zips 3 and 4



## BACK PACK MODE

TO REVERSE THE HARNESS INTO BACKPACK MODE



Undo Slider D and Zip 4 along with Slider C and Zip 3 at the rear of the harness.



Undo completely the zip of the rear pocket and turn it inside out.



Fold the leg supports and all straps neatly

The wing can be placed on top of the harness structure.



## HARNESS MODE

To convert from backpack mode to harness mode, reverse this procedure.



# PARAGLIDING MODULE

TRANSFORMING YOUR SWITCH TO PARAGLIDING MODE

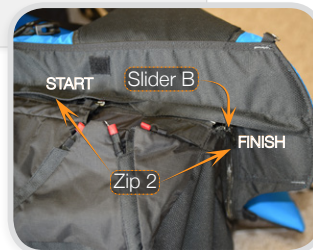
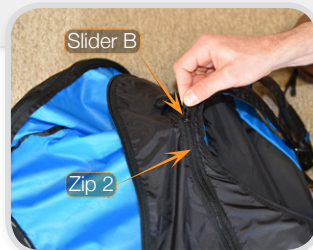
## PARAGLIDING MODE

The under seat protection and reserve parachute module is available as an optional extra. The paragliding mode is ideal for paragliding, hike and fly or mini wing flying - any time you expect to have plenty of altitude above the ground and require the security of a reserve parachute and back protection. To install the paragliding module refer to page 4&5 and follow these steps :

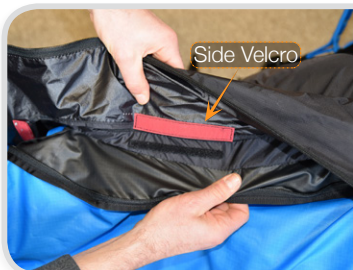
Attach harness Slider A onto module Zip 1 and close completely



Attach Slider B to Zip 2 and close completely. Zip 2 goes around entire harness.







Close the side and shoulder Velcros.

Whilst closing the shoulder Velcro neaten parachute shoulder attachment points.



Attach Slider E to Zip 3 and close.







Attach Slider F to Zip 4 on the other side and close.

Ensure the poppers at the ends of the Zips are secured.



Neatly attach the Velcro at the rear.



## RESERVE PARACHUTE INSTALLATION

The Switch has an integral under seat reserve parachute container and is supplied with a dedicated deployment bag. The container/ deployment bag is suitable for parachutes with a volume of between 3 and 6ltrs and will accept most modern rescue parachutes including the Angel SQ 140 and steerable Rogallo types.

**NOTE:** When installing the reserve parachute it is recommended to first mount the paragliding module to the harness.

**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.

**NOTE:** The integrated parachute can only be deployed with the right hand.

To install a reserve parachute you should first pack the parachute so that it matches the shape and dimensions of the deployment bag. You must use the dedicated Switch deployment bag/handle.





When installing the reserve parachute always start with the paragliding module in place on the harness. First completely unzip Slider B / Zip 2, located on the front right of the harness.

Attach the bridles to the shoulder attachment points using suitable connectors (not supplied)



Route the bridles through the channel and re-do Slider B / Zip 2.

And re-do Slider B / Zip 2.



**NOTE:** The Switch is only suitable for reserve parachutes with a short bridle



Ensure the harness bridle is correctly routed into the reserve compartment as shown. And make sure that Zip 2 is completely done up.

Attach the harness bridle to the parachute bridle using a suitable connector and secure the ends with elastics (not supplied).



Place the deployment bag neatly within the container so that the ① and the arrow match those on the main flap. The parachute lines should be uppermost.



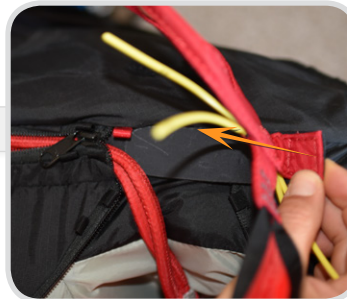
Now fold the deployment bag handle along the dotted line so the small arrow head matches the larger one.



The ② should now match positions on the handle and container.



Slide the black tag of the handle between the bridle and harness to hold it in position.



Now feed the yellow securing pins through the pin eyelets. Start with the pin located near the bridle. Each pin always starts with a red eyelet, feed the pin through each eyelet in order, there are four pins, make sure to not inadvertently miss any.





The end of the pin should be fed into the end pocket to fully secure it.

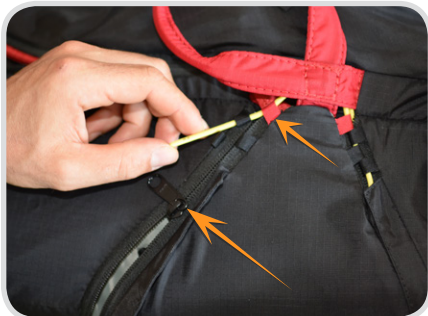
Now secure the next upper pin routing it through the eyelets. Ensure the red eyelet is routed first.



Run both container zips towards the reserve parachute handle, as far as they can go. Then reverse the direction of the zips to close the container. At this stage do not fully close the container, about half way is enough to secure the pin eyelets in position.







Feed both lower yellow plastics through their respective eyelets - always with the red eyelet first. Make sure both pins down each side of the container are correctly secured.

The parachute container and bridle compartment zips can now be closed fully.



Secure the zips within the red tags.



## UNDER-SEAT PROTECTION REMOVAL/INSTALLATION

The Switch features a certified EN/LTF inflatable under seat protector. Cleverly designed, it offers excellent impact absorption properties despite the low weight and volume. The optional paragliding module is delivered with the reserve/protection module in place ready to go, but should you need to remove or replace it please follow these instructions:

The protection is located in the zipped pocket of the reserve/protection module.



Unlock the stopper and remove it completely from the pipe.

With the protection deflated, feed the pipe through the hole in the pocket door and remove the protection.



Installation of the protection is the exact reverse of this procedure.



## UNDER-SEAT PROTECTION INFLATION

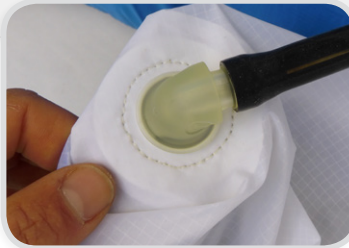


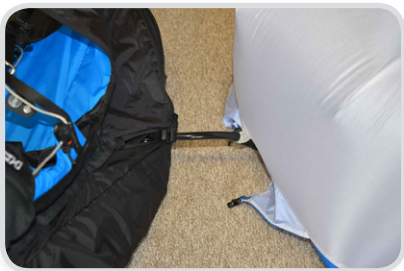
The protection is inflated by hand using trapped air inside the supplied special stuff sack.

To inflate the protection unzip the under side of the module to access the inflation pipe.



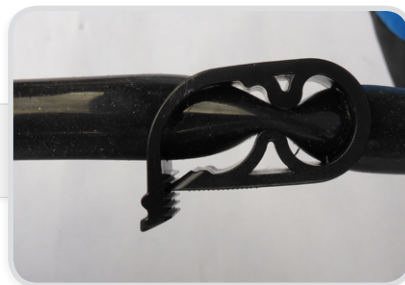
Make sure the stopper is in the open position and attach the inflation pipe to the outlet found on the stuff sack.





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. Make sure the stopper is fully closed and re-inserted within the zipped opening.



To deflate the air bag when reversing the harness open the inflation pipe stopper and gently squeeze the air out of the protection.

**IMPORTANT:** Ensure the inflation pipe stopper is properly closed before inserting the pipe into the pocket. Failure to do so will result in the air leaking out and the protection not functioning.



# PARAGLIDING TO SPEED FLYING

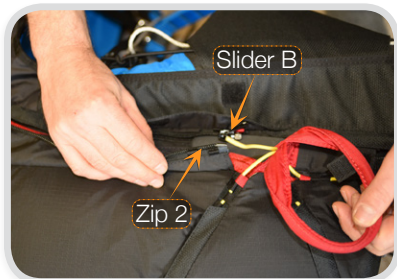
## CONVERTING FROM PARAGLIDING MODE TO SPEED FLYING MODE

The Switch can be quickly and easily converted from the paragliding mode into the speed flying mode by removing the reserve parachute/protection module.

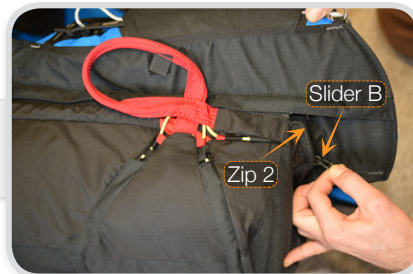
We recommend to only use this mode for speed flying or for flights in calm conditions when you do not expect to reach significant altitude above the ground.



Undo Sliders E & F from Zips 3 & 4 at the rear of the module.

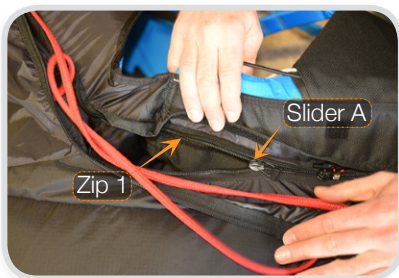


Unzip module assembly, slider B on Zip 2 found on front right hand corner all the way to the reserve parachute pins.



Carefully remove the upper parachute pin 1 being careful to not open the remaining pins.





Undo Slider A on Zip 1 that has now become exposed and fully detach the module along with the reserve parachute bridles from the shoulder attachments.

If you need a compressed rear pocket connect Slider C to Zip 3 and close. Do the same on the other side with Slider D and Zip 4.

NOTE: If you need a bigger rear pocket whilst flying in the Speed Flying mode, do not connect sliders C&D to zips 3&4.



Tuck in the bottom part of the pocket. The harness is now ready in Speed flying mode.





## USE AND MAINTENANCE

### CONNECTION TO THE WING



If you change the carabiners ensure that they are of a suitable dimension and fit correctly as shown

Attach the wing's risers to the carabiners at the main hang points. The A risers should be facing to the outside.



**There are no other suitable attachment points for the risers on the harness.**

### 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 carabiners looking for cracks or any signs of fatigue
- Risers connected correctly to the carabiners without twists
- Speed system attached and not tangled around the webbing
- Ensure all pockets are closed and zipped up
- Leg / Chest strap done up correctly
- Shoulder strap retainers fastened correctly
- **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 properly. 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.

## **TOWING**

The Switch is suitable for towing. The tow bridles should be attached to the main carabiners, if you have any doubts ask a qualified towing instructor or see the operating instructions supplied with your tow release system.

## **EXTERNAL PARACHUTE CONTAINER**

An additional parachute container (not included) may be added to the Switch. Use the main carabiners to secure the container and parachute bridles.



## **WATER LANDING**

After a water landing you should remove the reserve parachute, under seat protection and allow to dry completely. 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 under seat 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.**

## **CARE**

The Switch will last you many flights and many years if looked after correctly. 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 carabiner, 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.

If using a reserve parachute, the system should be checked every 6 months and the parachute repacked according to the manufacturer's recommendation.

## **DISPOSAL**

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.



## 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](mailto: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 Switch.

**Team Ozone**



## TECHNICAL SPECIFICATIONS

	S/M	M/L
Weight (kg)	2.0	2.2
Recommended pilot height (cm)	150 - 165	165 -185

Paragliding module : Back protection, carabiners and rescue bridles 725g

### **MATERIALS**

#### ***Harness Outer fabric***

Dominico 40D, 70D, fab Geo

#### ***Rucksack Outer fabric***

Dominico 40D, 70D, fab Geo

#### ***Main webbing***

Technisangle 7

#### ***Reserve parachute Bridles***

Dyneema 6mm

#### ***Buckles***

AustriaAlpin HS150

#### ***Carabiners***

Edelrid Foras

### **CERTIFICATION**

The Switch is certified EN 1651:2017 and LTF with a maximum load of 120kgs.





1258 Route de Grasse  
Le Bar sur Loup  
06620  
France

*Inspired by Nature, Driven by the Elements*  
**[WWW.FLYOZONE.COM](http://WWW.FLYOZONE.COM)**