

 **OZONE**

ZERO

YOUR WING IS HERE



ZERO



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ZERO

Thank you for choosing to fly Ozone.
As a team of free flying enthusiasts, competitors and adventurers, Ozone's mission is to build agile paragliders of the highest quality with cutting edge designs and performance and maximum security.

Confidence and belief in your paraglider is a far greater asset than any small gains in performance - ask any of the Ozone pilots on your local hills, or those who have taken our gliders on ground-breaking adventures and stood on podiums around the world. All our research and development is concentrated on creating the best handling/performance characteristics possible with optimum security. 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.

As pilots we fully understand just how big an investment a new paraglider is. We know that quality and value for money are essential considerations when choosing your new paraglider; so to keep costs low and quality high we build all our wings in our own production plant. During production our wings undergo numerous and rigorous quality control checks. This way we can guarantee that all our paragliders meet the same high standards that we expect ourselves.

This manual will help you get the most out of your wing. It includes tips and advice on how best to use it and how to care for it to ensure it has a long life and retains a high resale value. If you need any further information about any of our products please check www.flyozone.com, or contact your local dealer, school or any of us here at Ozone.

It is essential that you read this manual before flying your wing for the first time.

Please ensure that this manual is passed on to the new owner if you ever resell this wing.

Safe Flying!
Team Ozone



WARNING

Paragliding is dangerous. You could suffer serious injury or death as a result of using this equipment. Using this equipment improperly greatly increases the risks involved. Never use this equipment without proper and thorough instruction from a qualified instructor.

By using your Ozone paraglider, you accept all risks involved with the use of such equipment. The designer, manufacturer, distributor, and retailer cannot and will not guarantee your safety when using this equipment. You agree to not hold Ozone Gliders Ltd, nor Ozone Power Ltd liable for any injuries to yourself or to third parties resulting from the use of this equipment. It is essential that you understand the proper use of this equipment before attempting to use it in any way.

The User MUST:

Be an experienced and licensed paraglider pilot.

(For Snow Use) Be an experienced skier with competent knowledge of backcountry skiing and terrain, and be equipped with appropriate safety and rescue equipment when traveling in the backcountry.

Be in an area approved for the type of activity you are undertaking.

Use helmet and proper protective equipment.

Use the wing in a safe and hazard free environment.

Maintain the equipment properly and inspect it regularly.

Receive thorough and professional instruction for the specific activity prior to using the wing.

Ensure that all harness connections are fastened properly.

Always fly with a partner. Be aware of the other people you are traveling with in the backcountry at all times. Use the buddy system.

NEVER use your wing in turbulent wind conditions.

NEVER use your wing in a populated area or an area not approved for flying.

NEVER use your wing in a ski area or on a ski slope / ski piste.

NEVER use your wing around hazardous obstacles such as ski lifts or trees or rocks.

NEVER use your wing unless you have adequate safety and rescue equipment for winter backcountry travel such as avalanche transceiver, shovel, probe, and other avalanche safety equipment.

NEVER use equipment if there is any damage to harness, risers, webbing, lines, cloth or stitching.

YOUR ZERO

The new Zero is the most precise and compact mini-wing that we have ever flown. This advanced mini-wing design was more than two years in the making, and is based on what we have learned through the development of our smaller-sized mountain gliders and also the technological advances we have made in the Ozone Performance Project.

The Zero is the only mini-wing that features the patented Ozone SharkNose technology. The SharkNose, as proven in our highest level competition wings and now the Mantra and Delta series, provides enhanced stability at low angles of attack (accelerated flight) and also high angles of attack (slow speed flight, thermalling). In addition, it provides a high level of spin-resistance, generally improved handling, and increased speed and glide performance. In short, the SharkNose has significantly improved every aspect of flight in the Zero's design platform, making it a unique high-performance mini-wing which remains accessible and easy to use.

The Zero is accessible and easy to use, but is generally flown with higher wingloading than standard paragliders and therefore all pilots who are new to mini-wings should consult with an experienced instructor before their first flights with one. The Zero is suitable for paraglider pilots of intermediate skill, and above, who are trying this 'mini-voile' sport for the first time. It is also, of course, perfect for more experienced pilots who wish to fly it at a higher wing-loading and enjoy the speed and precision of this wing at its full potential. The table below shows recommended weight ranges for this wing, which does not have EN flight test certification. If you are uncertain what size to choose, please consult with your local instructor.

The Pack

The Mountain Pack is large enough to carry a standard harness and mini wing. It is also equipped with external straps that can be used to carry skis or snowboards and other equipment. We recommend always using appropriate safety and rescue equipment when traveling in the backcountry in snow conditions.

The Atak Harness (Optional)

The Atak is a special harness developed for mini wing flying. The hang-points, structure, and pilot positioning are all specifically engineered for speed-flying pilots. Your Atak harness is adjustable for upright and semi-reclined flying, although most experienced speed flying pilots prefer to be in an upright position in order to move from seated to skiing quickly and easily.

Brake Lines

The brake line lengths have been set carefully during testing. It should not be necessary to change the lengths. However, if you do choose to adjust them, do so in a progressive manner to ensure that they are not over-shortened.

IMPORTANT: In the unlikely event of a brake line snapping in flight, or a handle becoming detached, the glider can be flown by gently pulling the rear risers for directional control.

Risers

Your wing has 4 risers. Each riser is covered with coloured webbing, which makes them easy to identify.

The trimmer system can be used to aid inflation and increase or decrease your angle of attack. We recommend becoming very familiar with your wing before using the trimmer system.

Warning: Never fly with your trimmers released in turbulent conditions.

Accelerator System

To set up an accelerator on the ground, ask a friend to pull your risers into their in-flight position while you sit in your harness. Now adjust the length of the line so that the main bar sits just beneath your seat. You should now be able to hook your heel in to the secondary (lower) loop of the accelerator.

The accelerator must be slack enough to ensure that the front risers are not pulled down in normal flight, but not so long that it is impossible to use the full speed range of the glider.

Extending the secondary (lower) loop of the accelerator fully will take the glider through approximately half its accelerated speed range. Should you need even more speed you should hook your feet on to the upper bar, which you can then extend until the pulleys on the risers touch.

Once set up, test the full range of the accelerator in calm flying conditions: ensure that both risers are pulled evenly during operation. Fine-tuning can be completed when you are back on the ground.

IMPORTANT: Using the accelerator decreases the angle of attack and can make the glider more prone to collapse, therefore using the accelerator near the ground or in turbulence should be avoided.

FLYING YOUR WING

Mini Wing flying is still a relatively new sport. Because of this, you are an ambassador and representative and we ask that you please set a positive example to ensure the successful future of the sport. Please be responsible, and practice safe conduct. Never practice flying on populated ski slopes or pistes! It is expressly forbidden to fly in populated areas. When on snow, always carry with you all necessary avalanche safety and rescue equipment.

Never attempt to fly unless you have received instruction from a competent speed-flying instructor.

You must be responsible when you fly near any ski area. Contact the ski





resort safety service prior to flying near or at a ski area. Take time to explain the sport and be clear that the sport is never practiced on pistes or near other skiers. A clear presentation with photos, video, and a detailed safety explanation is necessary.

Always carry the avalanche safety and rescue equipment necessary for backcountry skiing. In any alpine environment the following equipment is necessary: avalanche transceiver, shovel, probe, back protection, and helmet. It is absolutely essential to check the weather forecast and snow conditions. Take any advice from qualified resort safety experts or high mountain guides.

You must be a competent skier and paraglider pilot before you attempt to fly on snow.

Do not fly by yourself. Always use the buddy system and be aware of the location and safety of your partners!

BASIC FLIGHT TECHNIQUES

To familiarise yourself with the glider it is a good idea to perform practice inflations and small flights on a training hill. This will enable you to set up your equipment correctly. If in any doubt please get advice and help from your local dealer or instructor. The Zero shows no unusual flying characteristics, consequently it is suitable for a very wide range of pilot. Turns are smooth and co-ordinated, whilst on glide it remains solid and well pressured throughout the accelerated speed range as it has a very high resistance to both collapses and stalls. However it is a small wing and it can be dynamic so fly it with due respect, with high safety margins and always be progressive.

➤ Preparation

Lay out the wing on its top surface in a pronounced arc, with the centre of the wing higher than the tips. Lay out the lines one side at a time. Hold up the risers and starting with the brake lines, pull all lines clear. Repeat with the stabilo, D, C, B and A lines, laying the checked lines on top of the previous set, and making sure no lines are tangled, knotted or snagged. Mirror the process on the other side.

Take-off checklist:

1. Check reserve parachute - pin is in and handle secure
2. Helmet on and fastened
3. All harness buckles closed - check leg-loops again
4. Karabiners and maillons tight
5. Holding the A's and your brake handles
6. Leading edge open
7. Aligned directly into wind
8. Airspace and visibility clear

➤ Launching

Your Zero will launch with either the forward or reverse techniques. It is recommended to release the trimmers approximately 2cm to aid the inflation behaviour.

Forward Launch - Nil to Light winds

When the wind is favourable, whilst gently holding the A risers move forward positively, your lines should become tight within one or two steps and the Zero will immediately start to inflate. You should maintain a constant pressure on the risers until the wing is overhead. Do not pull down or push the risers forward excessively, or the leading edge will deform and possibly collapse making taking-off more difficult and potentially dangerous.

Move smoothly throughout the entire launch, there is no need to rush or snatch at it. You should have plenty of time to look up and check your canopy before committing yourself. Once you are happy the Zero is inflated correctly, accelerate smoothly off the launch.

Reverse Launch - Light to Strong Winds

Lay out your wing as you would for the forward launch. However, this time turn to face it, passing one entire set of risers over your head as you turn. Now you can inflate the glider with the A-risers. Once the wing is overhead, release the risers, brake gently if necessary, turn and launch.

In stronger winds, be prepared to take a few steps towards the glider as it inflates. This will take some of the energy out of the glider and it will be less likely to overfly you. This reverse-launch technique can be used in surprisingly light winds too.

IMPORTANT: Never take off with a glider that is not fully inflated or if you are not in control of the pitch/roll of your wing.

Practice ground handling as much as possible! Not only is it great fun, but it will give you a much better feel for your wing's flight characteristics. It will also improve your overall enjoyment of flying by giving you the feeling of control and making your launches easier and less stressful.

➤ Speed to Fly

Flying at trim speed (hands-up), the Zero will achieve its 'best glide' speed for still air. You should fly at this speed when gliding downwind or when the air is not excessively sinking.

For better penetration in headwinds and improved glide performance in sinking air, crosswinds or headwinds, you should fly faster than trim speed by using the accelerator system. Using up to half bar does not degrade the glide angle or stability significantly and will improve your flying performance. You will reach the next thermal faster and higher. At full speed the Zero is stable; however we recommend that you do not fly at full speed close to the ground or in turbulent air.

By applying the brakes approximately 30cm, the Zero will achieve its Minimum-Sink rate; this is the speed for best climb and is the speed to use for thermalling and ridge soaring.

➤ Turning

To familiarize yourself with the Zero your first turns should be gradual and progressive.

To make efficient and coordinated turns with the Zero first look in the direction you want to go, then lean into it. Your first input for directional change should be weight-shift, followed by the smooth application of the brake until the desired bank angle is achieved. To regulate the speed and radius of the turn, coordinate your weight shift and use the outer brake.

IMPORTANT: Never initiate a turn at minimum speed (i.e. with full brakes on) as you could risk entering a spin.

➤ Active Flying

To minimize the likelihood of suffering collapses in turbulent conditions, it is essential to use active flying.

Flying with a small amount of brake applied (approx. 20cm) will give you feedback from the wing. In turbulent conditions the internal pressure of the wing can change and you will feel this through the brakes. The aim of active flying is to maintain a constant pressure through the brakes. If you feel a loss in pressure apply the brakes until normal pressure is resumed then raise hands back to original position (this must be done quickly). Avoid flying with continuous amounts of deep brake in rough air as you could inadvertently stall the wing. Always consider your airspeed.

These movements can be symmetric or asymmetric; you may have to apply both brakes or just one. These subtle adjustments will keep the glider flying smoothly and directly above you and dramatically reduce the chances of a collapse. If the glider pitches in front of you, use the brakes to slow it down. Equally, if the glider drops behind you, release the brakes to allow it to speed up. The goal is to always keep the wing directly overhead.

These are skills that are best learnt by playing with the glider on the ground!

IMPORTANT: No pilot and no glider are immune to collapses however active flying will virtually eliminate any tendency to collapse. When the conditions are turbulent, do not fly with the trimmers open and be more active to the movements of your wing. Always be aware of your altitude and do not over-react. We strongly advise you to always keep hold of your brakes. Do not fly in turbulent conditions.

➤ Landing

The Zero shows no unusual landing characteristics but as a reminder, here are some tips:

- Always set up for your landing early, give yourself plenty of options and a safe margin for error.
- Once below 30 metres avoid turning tightly as the glider will have to dive to accelerate back to normal flight. If you are at low altitude, or if you hit sink, this could mean you hit the ground harder than necessary.





- Lean forward out of your harness before the actual landing (especially if it's turbulent), with your weight leaning forward against the chest strap, and make sure your legs are ready for the landing and a possible PLF (parachute landing fall).
- Allow the glider to fly at hands up (trim) speed for your final descent until you are around 1 metre above the ground (in windy or turbulent conditions you must fly the glider actively all the way). Apply the brakes slowly and progressively to slow the glider down until groundspeed has been reduced to a minimum and you are able to step onto the ground.
- In light winds/zero wind you need a strong, long and progressive flare to bleed off all your excess ground speed. In strong winds your forward speed is already low so you are flaring only to soften the landing. A strong flare may result in the glider climbing upwards and backwards quickly, leaving you in a vulnerable position.
- If the glider does begin to climb, ease off the brakes (10-20cm) - do not put your hands up all the way - then flare again, but more gently this time. Keep the brakes at mid speed, stand up, be ready to run and make sure you brake fully as you arrive on the ground.
- Choose the appropriate approach style in function of the landing area and the conditions.
- In strong winds you need to turn towards the glider the second your feet touch the ground. Once facing the wing pull smoothly and symmetrically down on the brakes to stall the wing. If the glider pulls you, run toward it.
- If the wind is very strong, and you feel you might be dragged, or lifted again, stall the glider with the C risers. This stalls the wing in a very quick and controllable way and will drag you less than if you use the brakes.
- Always land heading into wind!

RAPID DESCENT TECHNIQUES

Ozone would like to remind you that these manoeuvres should be learnt under the supervision of a qualified instructor and always used with caution. Never forget that properly analysing the conditions before launch will help avoid the need to use these techniques.

Big Ears

Folding in the wingtips increases the wing's sink rate. This is useful for staying out of cloud or descending quickly. To pull big ears, keep hold of your brake handles and take the outermost A-line on each side, then pull down (preferably one at a time) until the tips of the wing fold under. The Outer A line is attached to the Baby A riser, making identification and use of the big ear system easier.

Do not use the brakes other than for re-inflation. For directional control while using the Big Ears, you should use weight shift. To reopen your big ears, release both A lines at the same time. To help reinflation, brake gently one side at a time until tips regain pressure. Avoid deep symmetric applications of the brake as this could induce parachutal or full stalls.

IMPORTANT: You can land with the ears (you should release the ears before final flare). Ozone do not advise you to do this when it's turbulent or windy due to the risk of a possible stall and lack of precision in steering.

Big ears and accelerator

Once the big ears are in you can further increase the sink rate by pushing on the accelerator bar.

NEVER try to pull the Big Ears in with the speed bar on. This can lead to a major asymmetric deflation. Always make the Big Ears first and then apply the speed bar.

Big ears and spiral dive

Whilst it is possible to enter a spiral dive whilst holding in Big Ears, the high forces applied to the lower lines could exceed the breaking strain of the lines leading to equipment failure!

Ozone strongly recommend to NOT use this manoeuvre!

Wingovers

The limit is tightly banked S-turns, commonly known as wingovers. These must not exceed 90 degrees of bank.

WARNING: Uncoordinated wingovers can lead to large asymmetric collapses and cravats, therefore they should never be executed near the ground.

B-Line Stall

B-stall is for fast descents in emergency situations only. It is faster and safer to lose altitude with a spiral dive than a B-stall.

To initiate the B-stall, keep the brakes in your hand and take hold of both the B risers, or place your fingers between the lines above the maillons. As you pull the B-lines down the airflow over the wing is broken and the glider loses its forward speed but remains open with a reduced cord. You can descend at around 6 m/s.

If you pull too much B-line the glider may horseshoe and move around a lot. If this occurs, slowly release the B lines until the wing stabilises or simply exit the B line stall. Do not hold a B line stall that is not stable.

To exit the B-stall the B-risers should be released symmetrically and in one smooth, progressive motion. The glider will resume normal forward flight without further input. Check you have forward flight again before using the brakes.

IMPORTANT: The pitching movement on exiting the B stall is small but necessary. We recommend you do not brake the glider until you are sure that the glider is flying properly again.

Spiral Dives

If you turn your glider in a series of tightening 360's it will enter a spiral dive. This will result in rapid height loss. To initiate a spiral, look and lean in to the direction you want to go, then smoothly pull down on the inside brake. The Zero will first turn almost 360 degrees before it drops into the spiral. Once in the spiral you should re-centre your weightshift and apply a little outside brake to keep the outer wing tip pressured and inflated.

Safe descent rates of 8m/s (1600 ft/min approx.) are possible in a spiral dive, but at these rates the associated high speeds and G-forces can be disorientating, so pay particular attention to your altitude.

To exit the spiral dive, ensure your weight shift is in a centred position and then smoothly release the inside brake. As the Zero decelerates allow it to continue to turn until enough energy is lost for it to return to level flight without an excessive climb and surge.

You should always be prepared to pilot the wing out of a spiral dive. To do so, smoothly use opposite weight shift and apply enough outside brake to stop the wing from spiralling, the glider will then start to resume normal flight. Never attempt to recover from a spiral with hard or quick opposite inputs as this will result in an aggressive climb and surge.

IMPORTANT: Spiral dives with sink rates over 8 m/s are possible, but should be avoided. They are dangerous and put unnecessary strain on the glider. Spiral dives cause disorientation and need time and height to recover. Do not perform this manoeuvre near the ground.



INCIDENTS

➤ Deflations

Due to the flexible form of a paraglider, turbulence may cause a portion of the wing suddenly to collapse. This can be anything from a small 30% (asymmetric) collapse to a complete (symmetric) collapse.

If you have a collapse, the first thing to do is to control your direction and return your trimmers to the slow position. You should fly away from the ground or obstacles and other pilots. Asymmetric collapses should be controlled by weight shifting away from the collapse and applying enough brake to control your direction. This action alone will be enough for a full recovery of the wing most of the time.

Once a glider is deflated it is effectively a smaller wing, so the wing loading and stall speed are higher. This means the glider will spin or stall with less brake input than normal. In your efforts to stop the glider turning towards the collapsed side of the wing you must be very careful not to stall the side of the wing that is still flying. If you are unable to stop the glider turning without exceeding the stall point then allow the glider to turn whilst you reinflate the collapse.

If you have a deflation which does not spontaneously reinflate, make a long smooth progressive pump on the deflated side. This pumping action should take about 1-2 seconds per pump. Pumping too short and fast will not reinflate the wing and pumping too slow might take the glider close to, or beyond, the stall point.

Symmetrical collapses reinflate without pilot input, however 15 to 20cm of brake applied symmetrically will speed the process. After a symmetric collapse always consider your airspeed. Make sure the glider is not in parachutal stall before making any further inputs.

If your Zero collapses in accelerated flight, immediately release the accelerator and manage the collapse using the same methods described above.

➤ Cravats

If the tip of your wing gets stuck in the lines, this is called a 'cravat'. This can make your glider go into a spiral, which is difficult to control. The first solution to get out of this situation is to stabilise the glider into normal flight, i.e get control of your direction and then pull down the stabilo line until the wing tip frees itself. You must be careful with any brake inputs or you may stall the opposite wing. You can also use strong deep pumps on the brake to the cravated side, when doing so it is important to lean away from the cravat otherwise you risk spinning or deepening the spiral. The aim is to empty the air out of the wing tip, but without spinning. Correctly done, this action will clear the cravat.

If it is a very large cravat and the above options have not worked then a full stall is another option. This should not be attempted unless you have been taught how to do it and can only be done with a large amount of altitude. Remember if the rotation is accelerating and you are unable to control it, you should throw your reserve parachute whilst you still have enough altitude.

IMPORTANT: A bad preparation on launch, aerobatic flying, flying a wing of too high a level or in conditions too strong for your ability, are the main causes of cravats.

➤ Deep Stall / Parachutal stall

It is possible for gliders to enter a state of parachutal stall. This can be caused by several situations including; a very slow release from a B-line stall; flying the glider when wet; or after a front/symmetric deflation. The glider often looks as though it has recovered properly but carries on descending vertically without full forward motion. This situation is called 'deep stall' or 'parachutal stall'.

It is unlikely to happen on any Ozone glider, but should it happen, your first reaction should be to fully raise both brakes. This normally allows the glider to return to normal flight. If nothing happens after a few seconds, reach up and push the A-risers forwards or apply the speed bar to regain normal flight. Ensure the glider has returned to normal flight (check your airspeed) before you use the brakes again.

IMPORTANT: Only a few cms of input from your brakes can maintain your wing in the stall. Always release your wraps if you have taken them!

IMPORTANT: Do not fly in rain, doing so significantly increases the likelihood of parachutal stalls occurring. To reduce the chance of stalling in rain avoid using deep brake movements or Big Ears. Find a safe area to land and using the speed bar, maintain a good airspeed at all times.

CARING FOR YOUR WING

➤ Caring Tips

Careless ground handling damages many paragliders. Here are some things to avoid in order to prolong the life of your aircraft:

- DO NOT drag your wing along the ground to another take-off position - this damages the sailcloth. Lift it up and carry it.
- DO NOT try to open your wing in strong winds without untangling the lines first - this puts unnecessary strain on the lines.
- DO NOT walk on the wing or lines.
- DO NOT repeatedly inflate the glider and then allow it to crash back down. Try to keep this movement as smooth as possible by moving towards the glider as it comes down.
- DO NOT slam your glider down on the ground leading edge first! This impact puts great strain on the wing and stitching and can even explode cells.
- FLYING in salty air, in areas with abrasive surfaces (sand, rocks etc.) and ground handling in strong winds will accelerate the aging process.
- If you fly with a wrap, you should regularly undo the twisting that appears on the main brake lines. By twisting the line become shorter and you can end up with a constant tension on the trailing edge (which can lead to problem on launch, stalling, glider not flying symmetrically, ...)
- Change your main brake lines if they are damaged.
- Be Careful when groundhandling to not saw the brake lines against the risers or main lines. The abrasion caused by a sawing motion can damage the main lines and lead to premature ageing of the risers. If you notice any signs of abrasion, especially to the lines, make sure

you get the wing professionally serviced and importantly. modify your groundhandling technique to stop any further damage.

It is recommended that you regularly CHECK your wing, especially after a heavy period of use, after an incident or after a long period of storage.

➤ Storage and Transport

Always store all your flying equipment in a dry room, protected from direct heat. Your wing should be dry before being packed away. Moisture, heat and humidity are the worst elements for damaging your glider. Storing a damp glider in your car under the sun would be terrible for example.

Take care that no insects get packed away with the wing. They may eat the cloth and make holes in a bid to escape. They can also leave acidic deposits if they die and decompose.

Transport the wing in the supplied bags and keep away from oils, paints, chemicals, detergents etc.

IMPORTANT: Never pack away or store your glider wet.

➤ Cleaning

Any kind of wiping/scratching can damage the coating of the cloth. We recommend for cleaning to use a soft cloth dampened only with water and to use gentle movements little by little across the surface.

If you land in salt water, you must first rinse it thoroughly with clean fresh water. Dry the wing completely, preferably out of the sun, in the wind. Never use a hair dryer, etc.

IMPORTANT: Never use detergent or chemical cleaners.

➤ Wing Repairs

Always let a registered dealer or the manufacturer carry out major glider repairs.

If you damage the sail:

If the rip is small, you can fix it yourself. You'll find all the materials in the repair kit you need. The fabric can be simply mended with the sticky rip



stop/spinnaker tape. When cutting out the patch remember to allow ample overlap around the tear and round the corners of the patch. You can find more information about repairing your wing on the Ozone website, including step by step instructions with pictures.

If you damage a line:

Any line that is damaged should be replaced. It is important that the replacement line is from the same material, has got the same strength and the same length. You can check its length against its counterpart on the other side of the wing, to make sure that it is symmetrical. Once the line has been replaced, inflate and check the glider before flying. If you do not have access to an Ozone dealer you can order individual lines at www.flyozone.com

➤ Maintenance Checks

It is vitally important that your wing be checked regularly. Your wing should be checked by a qualified professional for the first time after 1 year or 80 hours, whichever comes first and thereafter annually.

You are responsible for your flying equipment and your safety depends on it. Take care of it and regularly inspect all of its components. Changes in a wing's launching or flying behaviour are indicators of the glider aging. If you notice any changes you should have the wing checked before flying again.

The basic checks involve line measurement and breaking strain, as well as cloth porosity and tear strength. (Full details can be found on our website www.flyozone.com).

➤ Modifications

Your wing was designed and trimmed to give the optimum balance of performance, handling and safety. Any modification will probably make the glider more difficult to fly and less safe. For these reasons, we strongly recommend that you do not modify it in any way.

OZONE QUALITY

At Ozone we take the quality of our products very seriously. All of our gliders are made to the highest standards in our own manufacturing facility. Every glider manufactured goes through a stringent series of quality control procedures and all the components used to build your glider are traceable. We always welcome customer feedback and are committed to customer service. We will always fix problems that are not caused by normal wear and tear or inappropriate use. If you have a problem with your glider please contact your dealer/distributor who will be able to decide upon the most appropriate action. If you are unable to contact your dealer then you can contact us directly at info@flyozone.com

MATERIALS

All OZONE products are made from the highest quality materials available. Your wing is constructed from:

Upper Surface

Dominico 30D MF

Lower Surface

Dominico 30D MF

Internal Ribs

Dominico 30D FM

Main Lines

Edelrid 7343 Aramid 230/190Kgs

Mids / Uppers

Liros DSL Dyneema 140/70Kgs

RISER DIAGRAM



TECHNICAL SPECIFICATIONS

	15M	17M	19M
No. of Cells	35	35	35
Projected Area (m2)	13.2	14.9	16.7
Flat Area (m2)	15	17	19
Projected Span (m)	6.75	7.18	7.6
Flat Span (m)	8.27	8.79	9.31
Projected Aspect Ratio	3.4	3.4	3.4
Flat Aspect Ratio	4.5	4.5	4.5
Root Chord	2.27	2.41	2.55
Glider Weight	3.5	3.8	4.1

SUGGESTED WEIGHT RANGES

Total flying weight in kilograms including all equipment and clothing:

	15M	17M	19M
Beginner-Intermediate	<70kg	<80kg	<95kg
Intermediate-Advanced	70-90kg	75-95kg	95-110kg



LINE DIAGRAM



