



ROADRUNNER

Pilots Manual - EN



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THANK YOU

Thank you for choosing to 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, 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 or 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 which 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 a new wing, so to keep costs low and quality high we manufacture all of our products in our own production facility. During production our wings undergo numerous rigorous quality control checks that are fully traceable, this way we can guarantee that all of our paragliders meet the same high standards.

It is essential that you read this manual before using your wing for the first time. The manual does not replace proper training from a qualified instructor, it offers tips and advice on how to use and care for your wing to ensure a long life. For the latest updates, including all technical datas please refer to the online version found on the product's page on at www.flyozone.com.

If you need any further information about any of our products please check flyozone.com or contact your local dealer, school or any of us here at Ozone.

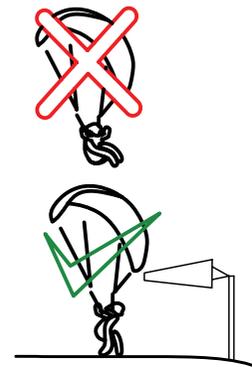
Safe Flying!
Team Ozone



WARNING

- Paragliding is a potentially dangerous sport that can cause serious injury including bodily harm, paralysis and death. Using an Ozone paraglider is undertaken with the full knowledge that paragliding involves such risks, even when ground handling.
- As the owner of an Ozone paraglider 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.
- The Roadrunner is for ground-handling purposes ONLY. It has NOT been designed, tested or certified for flight nor has it been subjected to a load test. DO NOT attempt to fly with this wing under any circumstances, doing so may result in serious injury or death.
- Seek professional instruction, do not attempt to self-learn paragliding.
- Be prepared to practice as much as you can - especially ground-handling, as this is a critical aspect of paragliding. Poor control whilst 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.
- Ensure the area you have chosen is suitable for ground-handling: Free from rotor, power lines, uneven ground, trees, fences, rocks or other obstructions.
- Make sure you complete a thorough daily and pre-flight inspection of all of your equipment. Never attempt to ground-handle with unsuitable or damaged equipment.
- Always wear a helmet, gloves and suitable footwear.
- 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 ground-handling.
- Choose the correct conditions for your level of experience, do not ground-handle in strong winds or strong thermic conditions.
- If you use good, safe judgment you will enjoy many years of paragliding.

Remember, PLEASURE is the reason for our sport



IMPORTANT
DO NOT attempt to fly
the wing under any
circumstances.



YOUR ROADRUNNER

The Roadrunner is an easy to use and highly forgiving ground-handling paraglider designed specifically, and solely for ground-handling training. It is optimised for use in wind speeds that are too high to practice with a standard sized paraglider, but is also easy to use in light or zero wind conditions.

A reinforced leading edge makes inflation easy. The Roadrunner's inflation characteristics are progressive and predictable. A three-riser system with split-A/B design allows training of various launch, control, and glider-disabling techniques. Magnet-attached brake handles are easy to grab, and re-place on the risers, while training.

Whether you are training for high wind or zero-wind launches, the Roadrunner allows a fun and easy progression. In strong wind the wing has no over-shooting tendencies, and doesn't generate too much lift either. In zero wind, it rises gently and with minimal effort.

Schools will love the ease of use and the cost-savings. Save your "flight" wings for flying, instead of wearing them out for ground-handling. The Roadrunner was designed from the start with price in mind, with the goal to increase training efficiency while lowering costs for schools.

Kids love it too! Introduce younger and lighter pilots to the joys of kiting.



Stuff Sack

As standard, your wing is supplied with a stuff sac. Its large volume allows you to store your wing easily whilst protecting it from dust and UV exposure. We have a large range of rucksacs available as optional extras at the time of order.

Brake Lines

The brake line lengths have been set carefully during testing. However, if you do choose to adjust their length please keep in mind the following:

- Ensure both main brake lines are of equal length.
- If a brake handle has been removed, check that its line is routed through the pulley when it is replaced.
- When the brakes are fully released in flight, the brake lines should be slack. There must be a substantial bow in them.

Risers

The Roadrunner has been designed with 3 risers per side. The A risers are covered with coloured webbing for easy identification.



LIMITATIONS

The Roadrunner has been designed as a solo ground-handling training wing suitable for all levels of pilots from beginner to advanced.

It has NOT been designed, tested or certified for flight nor has it been subjected to a load test. DO NOT attempt to fly with this wing under any circumstances. Doing so may result in serious injury or death.

Seek professional instruction before attempting to use the Roadrunner. It is not suitable for self-learning.

Total Weight in flight

There is no upper or lower weight limit however it is not suitable for light pilots in strong winds. Choose the conditions very carefully depending on the weight of the pilot. Light pilots are more likely to be inadvertently lifted off their feet. Consider the wind too strong if there is a chance of becoming airborne.

Towing

The Roadrunner is not suitable for tow-launching or any form of flight.

Flying in the Rain

Do not ground-handle in the rain or any adverse weather conditions such as excessive wind, turbulence or thermic activity.

Modifications

Your Ozone Roadrunner was designed and trimmed to give the optimum balance of control and safety. We strongly recommend that you do not modify your glider in any way.

IMPORTANT

DO NOT attempt to fly the wing under any circumstances.

IMPORTANT

Do not modify your wing in any way.



PREPARATION

Harness

Any certified paragliding harness is suitable for use with the Roadrunner, however we recommend to use one with a certified back protector for added security.

Wing

To prepare the wing, lay it out on the top surface and perform a thorough daily check. You should inspect the top and bottom surfaces for any rips and tears or any other obvious signs of damage. 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 (uppers), 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 and then inspect the lines for any visual damage. Then inspect the risers for any signs of obvious damage. The general rule is if it looks OK then it is OK, however if you have any doubts please get advice from an experienced pilot or your local dealer or instructor.

Inflation checklist:

1. Helmet on and fastened
2. All harness buckles closed - check leg-loops again
3. Risers connected to the harness correctly with carabiners and maillons tight
4. Holding the A risers and your brake handles correctly
5. Leading edge open
6. Aligned in the middle of the wing and directly into wind
7. Airspace and visibility clear



BASIC TECHNIQUES

Inflation

Your Roadrunner can be inflated with either the forward or reverse technique. The wing should be laid out in a pronounced arc, with the centre of the wing higher than the tips.

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 Roadrunner 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 process, there is no need to rush or snatch at it. You should have plenty of time to look up and check your canopy whilst gaining speed on the ground. Practice checking both tips are clear whilst running.

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 your body weight and the A-risers. Once the wing is overhead release the risers and brake gently if necessary. You can practice controlling it whilst facing the wing or alternatively turn and control whilst facing the wind. Practicing this transition will really help improve your technique.

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.

The reverse-launch technique can be used in surprisingly light winds too.

Whilst practicing ground handling aim to remain central under the wing, if it veers off to one side move under the centre of the wing whilst using opposite brake to bring it back overhead.

IMPORTANT
Always keep hold
of your brakes. Do
not use in turbulent
conditions.



CARE AND MAINTENANCE

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 or any hard surface as this is guaranteed to cause damage to the sailcloth. Lift it up and carry it clear of the ground.
- 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.
- Ground-handling in salty air, in areas with abrasive surfaces (sand, rocks etc.) and ground handling in strong winds will accelerate the aging process.
- DO NOT ground-handle in the rain or expose the wing to moisture.
- DO NOT expose the wing to unnecessary UV or high levels of heat. Leaving the wing sitting in the sun or allowing it to get hot (e.g in the back of a car) will significantly increase the chances of premature ageing.
- Change your main brake lines if they are damaged.
- When ground-handling be careful 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 the risers. If you notice any signs of abrasion, especially to the lines, make sure to replace them. It is important to modify your ground-handling technique to stop any future damage.
- Your wing has an opening on the wing tips called the 'Butt hole'. The Butt hole makes it easy to empty any sand, leaves, rocks, mobile phones etc that may have accumulated within the wing.

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

Your wing should be dry before being packed away. Always store all your flying equipment in a cool, dry room, protected from direct heat. Moisture, heat and humidity are the worst elements for damaging your glider. Storing a damp glider in your car in the sun will lead to premature ageing of the cloth and should be avoided at all costs.

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.

Cleaning

Any kind of wiping/scratching can damage the coating of the cloth. We recommend to not clean the wing, but if you do have to, use a soft cloth dampened with a small amount of water and use gentle movements 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 or other sources of direct heat.

Wing Repairs

Always let a registered dealer, professional repair centre or the manufacturer carry out any major or complex repairs, especially those near seam margins.

If you damage the sail:

If the rip is small and in the middle of a panel however 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 patches allow ample overlap of the tear and make sure both sides are different sizes. Make sure to round off each corner of the patches.

You can find more information about repairing your wing on the Ozone website, including step by step instructions with pictures.

IMPORTANT

Never pack away or store your glider wet.

IMPORTANT

Never use detergent or chemical cleaners.



If you damage a line:

Any line that is visually damaged **MUST** be replaced. Lines can be ordered from your local Ozone dealer or from a reputable paragliding service centre who will be able to make replacement lines. Contact your dealer for the most efficient option.

It is important that replacement lines are made from the correct materials and diameters. You should check lengths against their counterpart on the other side of the wing to make ensure symmetry. Once the line has been replaced, inflate and check the glider before flying.

Maintenance Checks

You alone are responsible for your flying equipment and your safety depends on it. Take care of your equipment and have it regularly inspected. Changes in inflation/groundhandling behaviour indicates the gliders aging, if you notice any changes you should have the wing checked before flying again. These are the basic elements of the check up:

Porosity is measured with a porosity meter, the time taken by a certain volume of air to go through a certain surface of the cloth. The time in seconds is the result. A measurement is done in a several places on the top surface along the span of the glider behind the leading edge.

The tearing resistance of the cloth - A non-destructive test following the TS-108 standard which specifies minimum tear strength for sky diving canopies should be made using a Bettsonometer. (B.M.A.A. Approved Patent No. GB 2270768 Clive Betts Sails)

Line length - The overall length (riser lines + mid lines + upper lines) has to be checked under 5Kgs of tension. The difference between the measured length and the manual length should not exceed +/- 10mm.

Risers - Visual inspection for signs of wear or abrasion. Differences to manual lengths should not exceed +/-5mm.

Canopy check - A full visual check should be carried out: All the components of the wing (stitching, ribs, diagonals, lines, tabs, ...) should be checked for signs of deterioration.



Packing

To prolong the life of your wing and to keep the plastic reinforcements in the best possible condition it is very important to pack the wing carefully.

Ozone recommends to use the concertina packing method exactly as shown so that all of the cells rest alongside each other and the plastic reinforcements are not unnecessarily bent. Using an Ozone Saucisse or Saucisse light pack will help preserve the life of the wing and aid with the speed and ease of packing.

Step 1. Lay mushroomed wing on the ground. It is best to start from the mushroomed position as this reduces the dragging of the leading edge across the ground.



Step 2. Group LE reinforcements with the A tabs aligned, make sure the plastic reinforcements lay side by side.



Step 3. Lay wing on its side and Strap LE...Note the glider is NOT folded in half; it is folded with a complete concertina from tip to tip. It is really important to not stress the middle cell or bend the plastic too tightly.



Step 4. Group together the middle/trailing edge of the wing by sorting the folds near the B, C and D tabs.



If using a Saucisse pack go to Step 8.



Step 5. Once the LE and rear of the wing have been sorted, turn the whole wing on its side.



Step 6. Fold the wing with 3 or 4 folds whilst being careful to not crush the LE.



Step 7. Now place the folded wing into the stuff sack.



Step 8. If using the Saucisse Pack, carefully zip it up without trapping any material.



Step 9. Turn the Saucisse on its side and make the first fold just after the LE reinforcements. Do not fold the plastic reinforcements, use 3 or 4 folds around the LE.



IMPORTANT: Do NOT lay the wing flat on the ground before packing the glider, this will cause abrasion damage to the top surface as you pull the glider towards the middle. ALWAYS pack from a mushroom or lift the wing off the ground when gathering the wing and grouping the leading edge.



IMPORTANT: Do not fold the glider in the centre, you will bend the plastics, instead pack the wing with a full concertina method from tip to tip before packing into the stuff sac.



OZONE QUALITY GUARANTEE

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're less likely to get hurt and more likely to have a great day's flying.

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.

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

Happy ground-handling & enjoy your Roadrunner.

Team Ozone



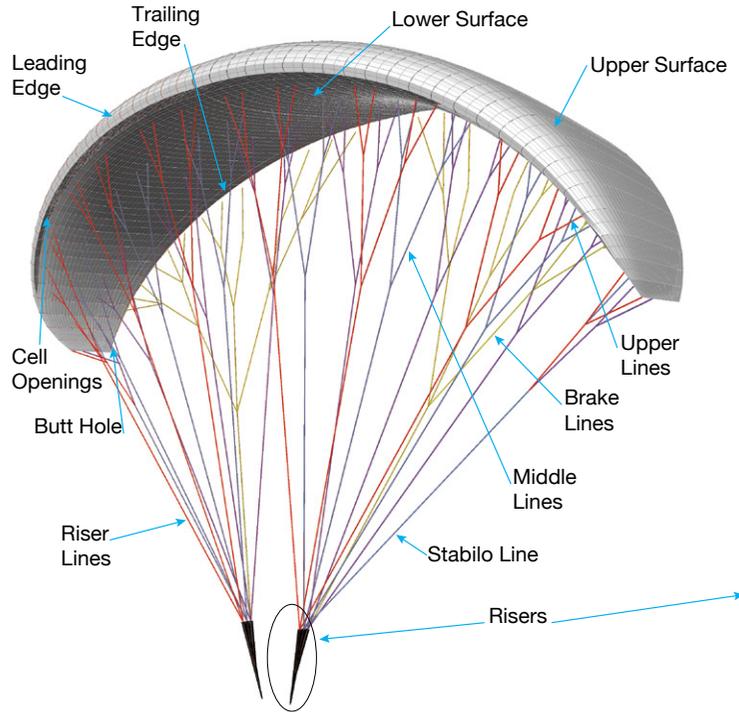
TECHNICAL SPECIFICATIONS

14

| | |
|----------------------------------|------|
| No. of Cells | 27 |
| Projected Area (m ²) | 12.1 |
| Flat Area (m ²) | 14 |
| Projected Span (m) | 6.06 |
| Flat Span (m) | 7.74 |
| Projected Aspect Ratio | 3 |
| Flat Aspect Ratio | 4.3 |
| Root Chord (m) | 2.36 |
| Glider Weight (kg) | 2.97 |
| Weight Range (kg) | > 40 |
| Certification EN/LTF | No |



TECHNICAL DRAWINGS

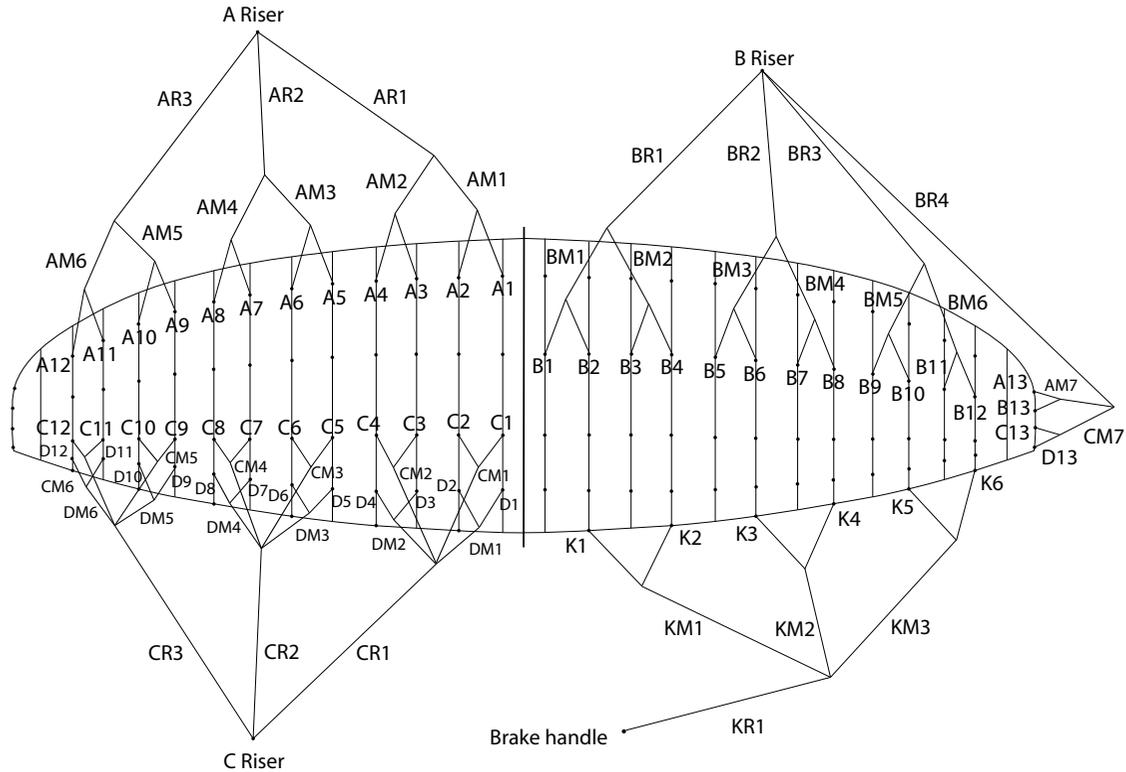


| Riser Lengths | |
|---------------|-------|
| A | 500mm |
| B | 500mm |
| C | 500mm |



LINE DIAGRAM

Individual and linked line lengths can be found online.



MATERIALS

All Ozone gliders are made from the highest quality materials available.

Cloth

Upper Surface

Dominico 40D MF

Lower Surface

Dominico 40D MF

Internal Ribs

Dominico 30D FM

Leading Edge Reinforcement

Plastic

Main Line Set

Riser Lines

Edelrid 6843

Middle Lines

Liros DSL

Upper Lines

Liros DSL

Brake Lines

Main brake Lines

Liros - 10-200-040

Middle brake lines

Liros DSL

Upper brake lines

Liros DSL

Risers and hardware

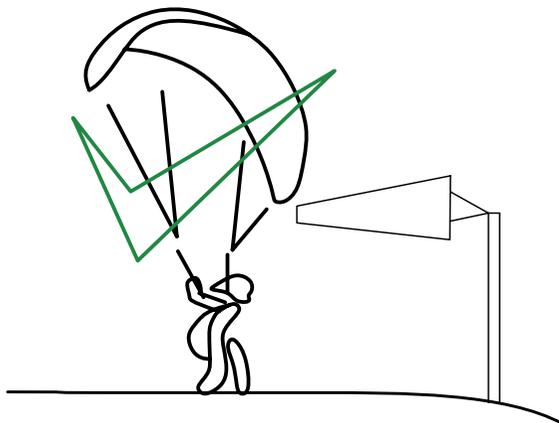
Shackles

Maillon Rapides

Riser webbing

20mm zero stretch polyester webbing





IMPORTANT
DO NOT attempt to fly
the wing under any
circumstances.





1258 Route de Grasse
Le Bar sur Loup
06620
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Inspired by Nature, Driven by the Elements

www.flyozone.com