



OZONE
POWER KITES



OWNER'S MANUAL

Contents

Setting Up Your Kite.....	2
Using Your Kite.....	3
Flying Tips and Tricks.....	4
Keeping Out Of Trouble.....	6
Packing Away.....	7
Looking After Your Kite.....	8
Warranty.....	9
Glossary of Terms.....	10
Diagrams.....	41
The Wind Window.....	42
The Beaufort Scale.....	43

If you sell this kite on please ensure that this manual also gets passed on to the new owner.

Thank you

for purchasing this Ozone kite. Please read this manual carefully before you take your kite out for the first time as it contains important information and safety precautions. Then keep this manual for the duration that you keep your Ozone kite and use it as a reference for information.

This Ozone kite should bring you hundreds of hours of entertainment and, flown safely, will last you for years. Traction kiting is a growing sport and riders across the globe are achieving incredible things and undertaking amazing adventures. To find out more and to keep an eye on technical developments within our sports please visit www.flyozone.com

Thanks

Team Ozone

Setting Up Your Kite

Two lines or four

Your Ozone kite may be either a 2-line or a 4-line kite. Some kites can be flown in both configurations. A 2-line set up is more suitable for beginners, or for use with a control bar. A 4-line set-up allows more control but requires more skill to master.

Lines and handles

Ozone lines are colour coordinated for easy identification. The thicker lines attach to the front of the kite and the thinner lines to the back.

Ozone handles are slightly asymmetric to allow greater control in 4-line mode. The longer side of the handle has a green leader line and attaches to the rear lines.

Knots

All attachments are made with the lark's foot knot.

How to hold the handles

Hold the handles loosely with your index finger and thumb just above the orange

leader line. This gives greater control than keeping all your fingers between the lines. Your hands should be relaxed and about half a metre apart.

Two-line mode

To fly an Ozone kite in 2-line mode you only need to attach one set of lines. Connect the flying lines to both leader lines on the handles (diagram 1), then connect the other end of the flying line to the link loops on the kite (diagram 3). To do this you must loosen the lark's foot knots and pass the additional handle line or link loop through before retightening.

Four-line mode

To fly in 4-line mode you need to attach both sets of flying lines. The thicker lines connect to the front of the kite and the shorter side of the handles, the thinner lines connect to the back of the kite and the longer side of the handle (see diagrams 2).

Using a harness strop

Ozone four-line handles can be used with a strop and harness. A harness will help you fly for longer sessions without getting so tired

but requires a high level of power kite skills as it is possible to get stuck in the strop and be unable to release from the kite.

Control Bar

To fly with a control bar attach the lines as you would for 2 line mode but instead of connecting them to the handles attach them to either side of the bar.

Using Your Kite

On the ground

Until you are familiar with handling kites in the wind it is advisable to get a friend to help you set up and launch. If you are alone you can weigh the kite down with sand or pebbles to stop it blowing away while you sort out the lines.

Take your kite out of the bag keeping the trailing edge into wind. Take hold of the coiled loops of line and the handles and walk backwards into wind releasing the line coils slowly and smoothly to avoid tangles. Some Ozone kites come with winders to make this task easier.

Before you launch check that you have no twists in the lines and that the area around you is clear of obstacles, people and animals.

Understanding the 'wind window'

The 'wind window' lies directly downwind and forms a 1/4 sphere around you. Flying the kite through different areas of the 'wind window' produces different amounts of power. There is more power at the centre of

the window and less at the edge (see diagram 5).

Launching

Parafoil kites must completely fill with air to gain their aerofoil shape before they can fly. To do this take a handle in each hand and pull smoothly on the front lines. Provided there is enough wind the kite will climb upwards to the highest point of the 'wind window'.

In strong winds it is advisable to ask a helper to take your kite to the edge of the 'wind window' where there is less power. By holding the kite vertically by one wingtip they can safely release it into the airflow.

In the air

Once airborne steering a kite is very simple. Fly the kite with your arms outstretched in front of you, then pull one of the handles towards you. The kite will turn towards whichever hand you pull. The kite will continue to turn towards that handle until you stop pulling and return both hands to the same neutral position. Then it will then climb back to the top of the 'wind window'.

In 4-line mode you can make your turns faster and tighter by using the brakes. The brakes are applied by pulling just the bottom of the handle. When you apply only one brake the kite will turn in that direction.

To obtain the most precise control you should use a combination of both styles of turning.

With a control bar

To turn pull one side of the bar towards you and push one side away in the same way that you would turn a bike's handle bars. The kite will turn towards the side you pull towards you.

Flying Tips and Tricks

2 lines: "The Simple Spiral"

Pull on one handle much harder than the other and the kite will enter a spiral dive. Count the number of turns the kite makes (the controls will become stiffer as the lines wind up), then reverse the controls before the kite hits the ground. Now fly it back up to the top of the window and repeat the same number of turns in the other direction to unwind the lines.

4 lines: "The Negative Spin"

Twist one handle so it pulls hard on one of the back lines, and stalls that side. The kite will enter a negative spin and continue spinning until you release the brake and allow both sides of the kite to fly again. Repeat on the other side to unwind the lines.

"The side slip stall"

Fly the kite to the side of the window then twist both handles to completely stall the kite. The kite will fly backwards across the window until you release it from the stall.

Using a harness strop

Ozone four line handles can be used with a strop and harness. A harness will allow you to kite for longer sessions without getting so tired but requires a high level of power kite skills as it is possible to get stuck in the strop and be unable to release from the kite which can be extremely dangerous.

Landing a kite

To land a kite, simply fly it to the edge of the window where it will lose its power. Once the kite has stopped pulling, fly it lower and lower until a helper can take hold of it. Make

sure they take hold of the sail material, not the lines.

With 4 lines you can stall the kite to the ground if the winds are light. However, the kite will pull you as it falls back through the 'wind window' and if the winds are strong this pull could be quite violent.

BEWARE - Landing kites can be particularly dangerous in strong winds.

Keeping Out Of Trouble

WARNING: Kite flying can be dangerous!

- Always use caution when flying any kite. You are responsible for your own safety and the safety of bystanders.
 - Make sure you have full control of your kite at all times.
 - Never fly the kite when there are people nearby downwind.
 - Onlookers should always stand behind the pilot for safety.
 - If you are out of control or in danger let go immediately, unless this endangers others downwind of you.
 - Kite lines under tension will cut like cheese wires - they can injure, maim or even kill.
 - Never fly a kite near high voltage cables, busy roads and airports or in stormy weather.
- Never fly your kite anywhere that is likely to annoy or threaten people or animals.
 - Never leave children unsupervised with a kite.
 - Remember every time you fly your kite in public, you are an ambassador for our sport - please act accordingly.
 - Your safety depends on the strength and security of your lines. Never attempt to fly any power kite with worn, damaged, knotted or frayed lines. If they break you could be seriously injured so check them regularly for damage and replace them at regular intervals regardless of wear.
 - Never attempt to use your kite as a paraglider

NEVER UNDERSTIMATE THE POWER A KITE PRODUCES

Packing Away

- Stall the kite to the ground and either stake the brakes down or get someone to hold the kite to stop it re-launching.
- Turn the kite 90 degrees to the wind and carefully toss all the bridling lines on to the sail.
- Fold the kite from the tips to the centre until it is narrow enough to fit in the bag.
- Once the kite is in the bag return to your handles leaving the kite and bag where it is.
- Now either wind the flying lines on to the winders or pick up the handles and place them together and wind the lines on to the handles.
- To do this first take hold of all the flying lines in one hand while holding the handles in the other.
- Wind the lines tightly round the top of the handle for a couple of turns and then

twice round the bottom before winding the lines tightly around the handles in a figure of eight pattern until you reach your kite bag. It is important to use the same hand to wind the lines on and off of the handles.

- Secure lines with a clove hitch and place your neatly wound lines and handles into bag.

For more detailed pictures visit our website and click on "Flying tips" www.flyozone.com

Looking After Your Kite

Ozone kites are designed and manufactured using the finest materials and construction methods, nevertheless, sailcloth and bridles are still subject to wear and tear even with normal use. To ensure your kite lasts as long as possible you must look after it, paying particular attention to the following points:

- Never pack your kite away damp.
 - Dry your kite naturally: never use a hair dryer or tumble dryer.
 - Even when your kite is dry, leave the bag slightly open to allow any residual moisture to evaporate.
 - Never store your kite near chemicals such as dyes, paints or gasoline.
 - Avoid cleaning your kite. If you have to clean it use only a soft cloth moistened only with water on small areas. Remember the most sensitive area of the wing is the leading edge top surface, which should never be cleaned.
- Never put your kite in the washing machine.
 - Never use any sort of chemical cleaner as these will damage the kite's fabrics.
 - Never walk on the kite or lines.
 - If you rip your kite small repairs can be made with sticky-back nylon cloth (spinnaker cloth).

Warranty

This Ozone kite has been designed and built for all round traction kiting and is made from the most suitable fabrics available at the time of construction. It has been extensively flown and tested by Ozone's design and test team and found to be suitable for all round traction kiting if used in the correct and proper manner for which it has been designed.

In the light of the foregoing Ozone shall not be liable for any injury, loss or damage arising from the use of this kite.

Before you use this Ozone kite you must for your own safety read and understand the entire manual, and all the instructions and warnings contained within it. You must also ensure that any other user of your Ozone kite reads and understands the safety notices and instructions contained within this manual before using the kite.

GLOSSARY OF TERMS

- Leading edge** - The front of the kite where the cell openings meet the airflow.
- Trailing edge** - The back of the kite where the upper and lower surfaces meet.
- Handles** - The two padded handles that attach to the flying lines - suited to general flying and buggying.
- Control bar** - The bar that attaches the flying lines to you - the alternative to handles. The control bar is more suited to kite surfing.
- Bridles / bridling** - The complex rigging lines that sit between the kite and the flying lines.
- Flying lines** - The main lines that link the kite's bridling to the handles or control bar.
- Link loops** - The short coloured loops that link the flying lines to the bridling.
- Lark's foot knot** - The standard linking knot used in kiting.
- Leader lines** - The short knotted coloured line that connects the handle to the flying line.
- Ground staking loops** - The short loops of line at the bottom of the handles that enable you to stake your kite down in a fully stalled position when you need a break.
- Winders** - The plastic bone shaped things for winding your lines on when not in use.