



KAHOONA USER MANUAL

BEST 
KITEBOARDING.COM

BEST KITEBOARDING USER MANUAL

Thank you for purchasing a Best kite. Please read this manual carefully and in its entirety before using your new Best kite.

WARNING

Kiteboarding/kitesurfing/snowkiting are extreme sports. They have numerous inherent risks and dangers, and pose substantial risk of cuts, scrapes, bruises, broken bones, loss of limbs, loss of vision, paralysis, and other serious, permanent and disabling injuries and death to the rider and others. Some of the sources of these risks include but are not limited to:

- Being lifted by the kite and then dropped or slammed into the ground, snow, trees, rocks, buildings, piers, jetties and/or other structures or surfaces.
- Being dropped or slammed into other people and/or property.
- Contact with kite lines under tension, and/or watercraft.
- Drowning.
- Underwater conditions and/or objects such as sharp shells, broken glass, sand bars, shoals, reefs, oyster beds, and/or concrete.
- Contact with sea life such as sting rays, sharks, sea turtles, jelly fish, etc.
- Weather conditions and/or changes in weather conditions such as increasing or decreasing wind, waves, updrafts, lightning and/or water spouts.
- Equipment performance. Kiteboarding is a new sport. Kiteboarding equipment and safety gear are NOT 100% reliable. Safety designs and features are often new and unproven. Kites may behave unfavorably and unpredictably. Lines can twist, tangle, or break, resulting in serious injury and/or loss of control of the kite.

When using this product, you are responsible for your own safety and the safety of others around you. Never use this product as a flying device. Never touch flying lines when the kite is in use.

RELEASE OF LIABILITY AND ASSUMPTION OF RISK

DO NOT USE THIS PRODUCT UNLESS YOU AGREE WITH THE
FOLLOWING TERMS AND CONDITIONS:

Before using this product, the purchaser/user has carefully reviewed, understood and agrees to comply with the terms of this User Manual. Use of this product and any of its components involves certain inherent risks, dangers and hazards, which can result in serious personal injury or death. The purchaser/user of this product understands that the seller is not responsible for any damage to property or injury caused by negligent operation of this product by the purchaser/user, and the purchaser/user releases the seller from all such liability. In the event of your death or incapacity, this Agreement shall be effective and binding upon your heirs, next of kin, executors, administrators, assigns and representatives.

The purchaser/user of this product expressly assumes the risk of any and all bodily injury, death and/or liability which may result from the purchaser or user's participation in kiteboarding. The purchaser/user agrees to hold Ride Best, LLC harmless from any and all liability, and waive and release any and all claims or potential claims against Ride Best, LLC and any of its respective agents, affiliates, subsidiaries, employees, instructors, officers, directors, shareholders, suppliers and manufacturers in the event of any such bodily injury or death which may result from the purchase and/or use of Ride Best LLC (d/b/a Best Kiteboarding, LLC) products.

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Kahoona: Progression in every session.



Introduction:

Best Kiteboarding would like to thank you for choosing the new 2009 Kahoona. We guarantee this and all of our products to be free from defects in materials and workmanship. All Best products are covered by our Fair and Reasonable Timeframe warranty, which offers extended coverage beyond that provided by other brands.

Best Kiteboarding has a dedicated, year-round R&D team comprised of our world-class technical staff and pro-team riders. We never stop testing and we never stop improving our products, you can be sure that everything we make has been fully tested in the most extreme locations the world has to offer.

The new Kahoona is the perfect choice for every rider looking for a super stable, easy-to-rig, easy-to-fly kite. A reduced aspect-ratio and swept leading edge make the Kahoona Best's quickest relaunching kite: it is the perfect kite choice for beginners and intermediate riders looking to maximize their progress every session.

A new Redline Safety System control bar delivers instant safety-depower whenever you push the QR or drop the bar. With short bridles and only four flying lines there is nothing to wrap around the kite should you roll it while relaunching. Redline Safety System allows you to forget about the kite and concentrate on your riding.

Our Quad-Strut swept-tip design helps minimize drag for faster, easier turning helping to improve low wind ability. Responsive handling, great downwind drift and auto-relaunch combine to help make the Kahoona the most evolved big-wave surf kite we've ever made.

A new VP2 mini-bridle provides the Kahoona with a large wind range and helps maximize stability in all riding conditions, especially when riding unhooked or overpowered. Single point connections for front and rear flying lines simplify your rigging options and make the Kahoona incredibly quick and simple to set-up even for novice riders.

The Kahoona's auto-relaunch, ease of set-up, large wind range and reliable safety will help make you progress faster than you thought was possible. It comes loaded with ease of use and safety features that are out of this world- at a surprisingly down to earth price.

Kahoona: Kite package

Your Kahoona kite is delivered complete with the following items:

- Over-the-shoulder carry bag.
- High-volume, dual-action pump with alloy shaft.
- Bladder and canopy repair kit.

Kahoona: Performance features and kite set up

When unpacking your Kahoona for the first time, we recommend that you take some time to familiarize yourself with the product and design features that make your kite unique. This will help you set up the kite correctly the first time, ensuring you gain the maximum potential from its high-performance design.

Auto-relaunch:



The swept back wingtip design and reduced aspect-ratio of the Kahoona combine to deliver near automatic relaunch in any conditions. The Kahoona is the fastest relaunching Best kite making it perfect for beginners and big-wave surfers.

Quad-strut design:



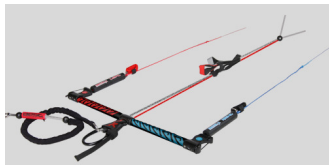
The leading edge shape and highly swept wingtips of the Kahoona allowed the R&D team to remove the centre strut from the airframe: with one less strut in the air the Kahoona is able to turn faster, with less drag and fly in less wind than would be possible with a 5 strut layout.

Mini VP2 Bridle:



A short leading edge bridle provides exceptional shape support and effective distribution of canopy loads across the entire kite: the Kahoona has stability that will encourage you to push your limits. VP2's innovative pivoting design provides maximum depower from minimum bar travel making kite control simpler than ever.

Redline Safety System:



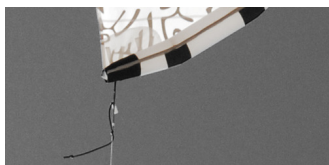
Dropping the bar onto the leash or firing off the chickenloop QR cuff both activate our new front line safety system, placing the kite at maximum depower with very limited residual pull in the kite. A simple and effective safety-depower system that ensures your kite is ready to be relaunched as soon as you are.

Reduced Aspect Ratio:



A reduced tip-to-tip span and increased centre draft help provide maximum projected area without flattening out the kite: combined with the raked back wingtips these allow the Kahoona to provide excellent low end power in every kite size.

Hi-Lo Tuning:



Because simplicity counts the Kahoona has only two rear flying line attachment settings, one for high wind and one for low wind: kite set up doesn't get any easier

3D Kevlar Airframe:



Our 3DK' airframe joints are 3D shaped to ensure a precision fit. Kevlar reinforced webbing secures each seam to ensure maximum strength and absolute consistency. A more accurately built kite delivers greater performance wherever and however you ride it.

Optimized Aspect Ratio:



Every size of Kahoona we make is tuned to deliver a consistent feel when ridden against all the other sizes in that range. We modify the speed of our smallest kites to allow for easy handling, and maximize the speed and turning ability of our larger sizes to make lightwind riding more enjoyable.

CFT:



Canopy Framing Technology is the original canopy protection system; each section is cut on the curve to help reduce potential crash damage by dissipating impact energy away from the lightweight sections of canopy cloth. Adding CFT to the leach line helps provide razor-sharp turning response and unmatched durability.

Surf-Tough Build Quality:

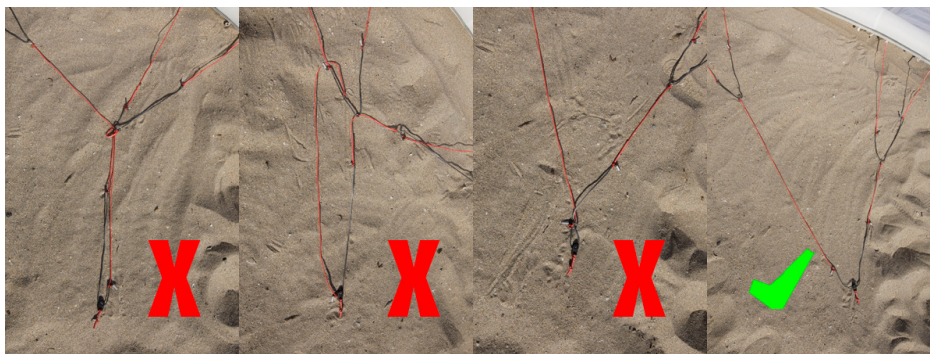
Our unique Canopy Framing Technology, LE Load Flex seam, fully taped canopy and Solid Airframe Construction come together to deliver the most proven and trusted kite construction package in the industry. A kite purchase is a considerable investment. However, with the legendary Best Kiteboarding build quality and warranty, it is the smartest investment you will make this year

Setup Options and Pre-flight checks:

The Kahoona is shipped with all bridle lines secured to the center strut valve retaining Velcro. When you receive your kite, unroll your Kahoona and remove the foam valve protectors. Next, detach the bridle lines from their traveling position on the center strut and separate the bridles into left and right.

Front Lines: The front attachments are comprised of a leading edge bridle that terminates on both sides with a closed loop (*larks head*) and replaceable center section that the VP2 pulleys travel on. Should advanced signs of wear show on either the pulleys or bridle after extended use, contact your nearest dealer for replacement parts.

When unpacking your kite for the first time, correctly lay out the front bridle as shown below. For maximum performance and correct depower function, it is important that the front bridle is free from twists and knots.

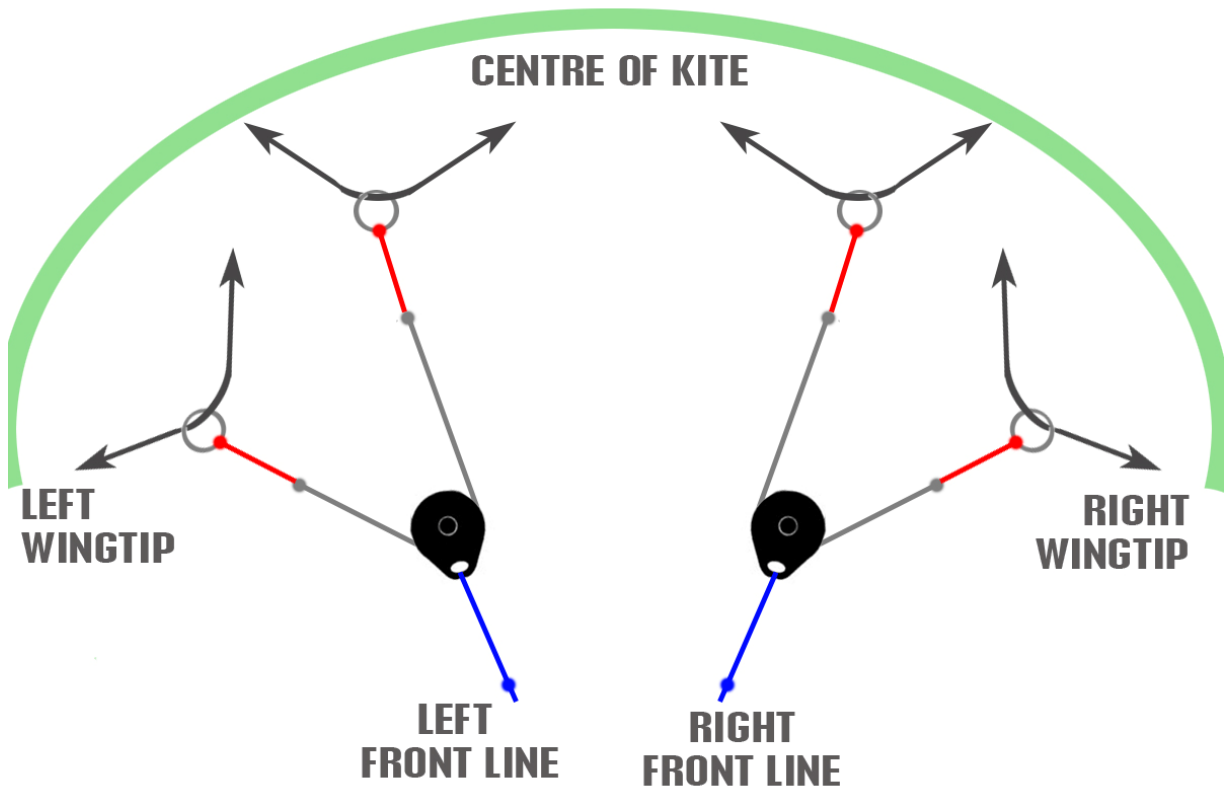


When correctly laid out, the mini-VP2 section of your front bridle should look exactly as the image on the bottom right. Any twists in the bridle can be removed by counter-twisting the lines where they connect to the front flying lines. Any twists

should be removed before attaching the flying lines.

Only attach your front flying lines to the knotted pigtail attached to the pulley.

All pulleys run on abrasion resistant woven spectra insert lines. This line is chosen specifically for its flexibility and abrasion resistance. Due to the use of moving parts it is recommended that you check the smooth operation of the pulleys before each flight. When laid out correctly the front bridle should look as seen below.



NB: Any damage parts on the main bridle should be replaced immediately, failure to do so could result in the loss of your kite or serious injury to yourself or others around you.

Rear Line Rigging: Hi-Lo tuning



The rear flying-line attachments on the Kahoona have been simplified to make life easier, the Kahoona offers two tuning options, one for hi-wind (the lower **RED** knot position) and one for low-wind (the upper **GREEN** knot position).

Pre-flight checks:

Riders should perform a thorough inspection of their kites each time they set-up, and prior to launching, to ensure that the kites have sustained no damage during use. Any damage should be repaired by a professional kite or sail loft to ensure continued safety and usability.

It is worthwhile inspecting all flying line attachments, pigtails, pulleys and pulley insert lines before each flight. Damage to any of these areas may well render your kite unsafe to fly.

Self-launching the Kahoona:



The Kahoona can be self-launched from the beach like any of our kites.

Although the Kahoona has line deflectors on the strut ends to ensure that flying lines do not become entangled in the airframe, when self launching, make sure that the front bridles (highlighted **RED**) are placed clear of the wingtips of the kite prior to sanding down the wingtip.

Position your fully inflated kite with the lines attached at the edge of the window, your flying lines should run directly across the wind, and then place your bar at the opposite edge of the wind window.

Placing sand on the inside of the kite behind the 1st strut towards the 2nd strut helps to keep the kite flat to the wind until the wingtip has been folded over and secured with more sand. Fold the wingtip over on the leading edge, and sand down the folded wingtip. Before going back to your bar to launch, wait at the kite for a while to ensure you have placed enough sand on the kite to hold it down.



Return to your bar, which should be positioned across the wind, on the opposite side of the wind window from your kite. Hook into the chickenloop, and take a second to check your lines visually one last time. With the bar firmly in your grasp and the bar positioned at 50% depower position, pull the top of the bar towards you and step backwards.

Pulling the bar back towards you and stepping backwards will flick the sand off the wingtip, releasing the kite and allowing it to self launch. ***If it is possible to have someone experienced assist in the launch, this is always the preferred method.***

Assisted Landing of the Kite:

When landing your kite with an assistant, simply fly the kite to the edge of the window and down to ground level slowly. Have your assistant take hold of the kite firmly in the middle of the leading edge. Both you and your assistant should walk towards each other to remove all tension from the flying lines.

Your assistant can either lay the kite down and sand the upper canopy, or hold the kite until you are unhooked from the bar and safely able to take over the kite

Self Landing the Kahoona: **Redline** safety system.

To land your Kahoona using the Redline safety system, first ensure that you are attached to the leashing point on the chickenloop, depower the kite fully using the trim strap, and then either unhook from the chickenloop or fire the chickenloop mounted quick release by pushing the collar up and away- towards the kite.

(The detailed example overleaf shows the rider unhooking and dropping the bar to activate the safety).



1. Depower the kite, hold the chickenloop ready to unhook.
2. Let go of the bar and begin unhooking from the chickenloop.
3. Unhook completely and drop the chickenloop, this activates the Red-line safety.

Once released onto the Redline safety, your kite will fall to the ground in the downwind position, with the bar coming to rest a few metres up your front line. Your Kahoona is designed to sit on the Redline safety with minimal pull. Secure your leash to a fixed object before you move to sand down your kite.



NB: Wherever possible we recommend that riders always seek an assisted landing from an experienced helper.

Self Landing the Kahoona: Rear line OSR

We always recommend that riders use the Redline safety to land their kite if unassisted, the rear line handles are primarily intended as back up safeties for use should you be unlucky enough to break a front line or be unable to untangle your front flying lines after performing multiple rotations or kiteloops.

NB: You must detach the bypass/handlepass leash from the Red-line leash ring before attempting to land the kite via the rear line OSR handles.

Fly your kite to the side of the window leaving the kite at an angle of about fifteen degrees to the ground, this equates to the lowest wingtip being about 5m from the ground.

With the kite at the edge of the window and the retaining Velcro on the OSR handle already loosened, sheet-out, reach up and grab the lower of the two OSR handles. With the webbing loop firmly in your grasp, unhook while holding onto the webbing handle and proceed to drop the bar. The Kahoona will fly slightly to the edge of the window, and then loop under itself, coming to rest on the beach in the dead downwind position, facing into the wind with the leading edge facing up.

NB: This method is only recommended if you have more than two line-lengths of downwind space and it is impractical to land your kite using the front line OSR handles.

Water Relaunching the Kahoona:

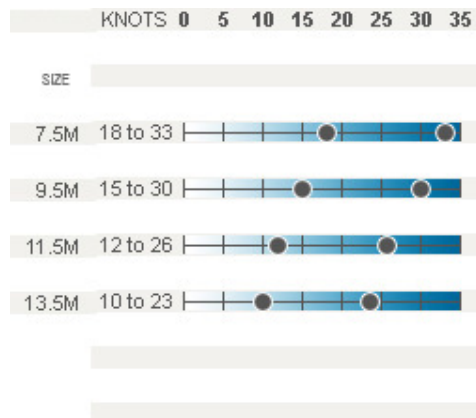
The Kahoona has 'built-in' auto-relaunch capability due to the highly swept shape of the wingtips and the geometry of the mini VP2 bridle, it is by far the easiest relaunching kite in the 09 line up. With the kite's leading edge down in the water, simply depower the kite via the trim strap, then pull and hold either of the back lines to start the relaunch process.

The kite will taxi across the wind window, eventually rotate upwards into an upright position, and then await relaunch which is performed by pulling backwards on the bar side that corresponds to the upwards facing wingtip. As the kite is relaunching off the water, be careful not to pull all the way in on the bar, which could overshoot the kite and cause it to fall backwards into the water. Instead, as the kite begins to lift from the water, push out on the bar a little to allow it to breathe.



In lighter winds, it may be beneficial to use your board to create extra resistance to the pull of the kite, to enable faster relaunch, and to speed the kite taking an upright position at the edge of the wind window. Once in this position, simply adjust the bar and steer the kite, launching it upward.

Wind Ranges:



The suggested wind range chart is to be used as a guide.' Always know your limits, and when in doubt rig a smaller kite, if possible. Wind speeds may vary according to where they are taken. Always take a wind reading more than 100m past the nearest upwind object to get an accurate maximum reading. If flying in the mountains, always take a wind reading towards the highest point of land as wind accelerates up hill.

The wind ranges given above are based on a 75kg rider and kitesurfing usage. For snowkiting and landboarding the wind ranges will vary according to snow and surface conditions but will be 3-5 knots lower for bottom end and 4-6 knots lower for top end. The lower wind range for any kite can be increased by the use of a larger surface area or volume board.

To estimate usable wind range for different weights assume that an additional 10kg/22lbs will cost you 3 knots of low end and improve your high-end by 3-5 knots.

If you cannot keep your kite stable at wind speeds approaching or above the upper stated limits for each size kite, then please do not attempt to exceed your skill level. Depending on your skill level and bar set up it is possible, though not advisable, to attempt to ride outside of the stated wind speeds and still retain control of the kite.

Kahoona FAQ overleaf:

Kahoona FAQ:

Is the Kahoona a Delta kite?

The Kahoona has a swept back leading edge and truncated wingtips, these two characteristics appear to broadly define the Delta design.

In common with Delta kites the Kahoona is particularly easy to relaunch and very easy to fly, it additionally provides exceptional stability in all wind conditions.

What style of riding is the Kahoona most suited to?

The Kahoona excels across a wide range of riding conditions: beginners will quickly find themselves progressing faster than they had previously due to the Kahoona's easy handling and relaunch; riders have found that they feel confident on the Kahoona very quickly and are more willing to push themselves because of this.

Big-Wave surfers love the Kahoona as it allows them to stay on the face of a wave longer than other kites, helping them to extract the longest ride possible from each wave. Freestyle riders like the Kahoona for its stability when unhooked, a solid, steady bar feel when unhooked allow you to throw more unhooked moves more easily.

What handling adjustments does the Kahoona offer?

The Kahoona is designed to be the easiest kite to use in our line up, for that reason we have resisted the temptation to add extra pigtail points and steering attachments to the Kahoona.

The Kahoona will fly perfectly out of the bag on the new Red-line bar, the only adjustment you will ever need is the Hi-Lo tuning setting that allows you to compensate for low and high winds by moving the rear lines between the two rear bridle knot positions.

What bar size should I use with my Kahoona?

All sizes of the Kahoona work perfectly with the 50cm Red-line bar, the smaller kites have been slowed down a little to make them easier to fly for intermediate and beginner riders while the large sizes have been trimmed for faster turning to maximise their low wind handling and ability.

What wind range can I expect from my Kahoona?

The Kahoona has excellent wind range that is broadly similar to the Waroo. Due to the additional 1/2m sizing on the Kahoona each kite beginner may find the Kahoona has slightly better low end than a similar size Waroo, advanced riders will still attain better low wind performance from the Waroo.

How should I care for my Kahoona?

Inflate and deflate your kite with care. Follow proper inflation techniques and pack your kite when it is completely deflated and dry.

Do not leave the kite inflated and sitting in the wind unused for long periods of time, as this accelerates wear to the canopy cloth. Inspect the kite periodically for small holes or tears and patch when detected to eliminate costly repairs.

Can I use a bar from other kites on the Kahoona?

Yes, however, certain precautions need to be taken into consideration when using other bars. It is best to seek technical assistance before rigging a 'non-Best bar' to the kite.

The Kahoona is designed to work perfectly with the new 09 Red-line bar. The Red-line bar is calibrated for the Kahoona bridle length, if you use a standard Best Bar with the Kahoona then you will need to purchase the 'Red-line bar conversion' pigtail accessory kit.

How hard should I pump my Kahoona kite?

We recommend 9-10-PSI for the Kahoona: smaller kites require slightly more inflation +.5 PSI and larger kites up to .5 PSI less. An under-inflated kite will be problematic through the flight cycle and when re-launching. Some riders have noted that in adverse wind conditions, inflating the kite slightly above the recommended PSI has delivered further benefits in improved stability. This is particularly noticeable in the snow where the cold air temperature may lead to a decrease in internal air pressure over time.

Due to the hugely increased risk of impact damage when flying on land, we recommend that landboarders and snowkiters do not exceed the recommended inflation pressure of 10 PSI. Do not store your Kahoona with inflated struts inside a vehicle during the summer, as in-car temperatures can rise rapidly leading to a catastrophic increase in strut pressure. We recommend that when storing the kite for any period of time, all the valve plugs be removed from the valves. Also, do not leave the sticks on the struts inside of the valves when storing the kite, as this could rupture the membrane valves.

What safety systems are built into the Kahoona?

The Kahoona is designed with safety in mind. The Delta shape kite outline naturally endows the Kahoona with a high level of stability, when this is combined with high depowerability you have a kite that is both easy and safe to ride.

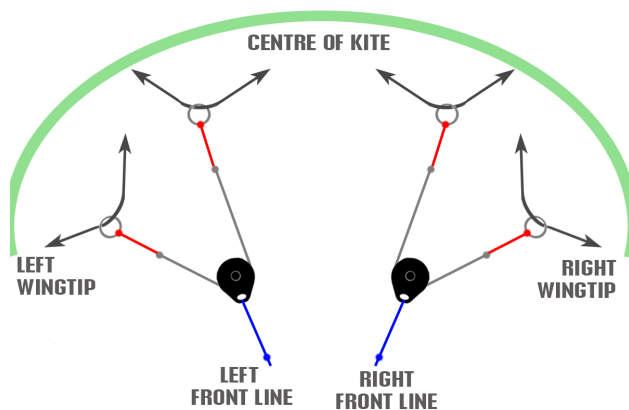
The Red-line Safety system uses both front flying lines to depower the kite, by dropping the bar onto the leash by firing the chickenloop QR cuff or unhooking the bar from the harness, you quickly place the kite at maximum depower. When dropped onto the Red-line safety leash the Kahoona has much less residual pull than either the Waroo or the Nemesis HP. It has been designed expressly to have as near to complete depower as is possible while still being able to retain active control of the kite. The red-line bar retains the rear flying line 'OSR' handles as used on previous bars, this allows you to land the kite safely should you have an unmanageable tangle in your flying line or manage to snap a front line.

NB: Before taking to the water always ensure that the rear line OSR handles are detached from their Velcro retainers and are hanging loosely from the rear lines.

How do I pack my Kahoona?

For the quickest pack down, open the strut valves and deflate the LE and struts. Fold the kite in half from wingtip to center and overlay the two halves of the kite. Roll the kite from wingtip to center strut along the trailing edge, and then gently fold the kite from tip to tail into 3 using a Z shape, rather than rolling into a C shape, before placing it in the bag. Don't try and fold your TE battens in half...

How do I replace worn bridles on my Kahoona?



The Kahoona front bridle has user-replaceable heavy duty inserts fitted at two points; within the upper bridle, for the sliding rings, (**detailed in dark grey**), and also for the lower pulley section (**detailed in light grey**). Should these become worn, simply undo the retaining loops at either end and fix in place a replacement set. It is recommended that you replace both sides, left and right at the same time even if only one side is showing wear.

Thread the lines through the pulleys according to the diagram shown; and carefully cinch up the larkshead knots. After replacing the VP2 bridle lines, always ensure that you have someone to

assist you in launching the kite. With the kite held into the wind by your assistant, check the depower action of the front bridle by moving the bar up and down. **Do not launch the kite if the depower does not function correctly**

NB: If you are relatively new to kiting or feel at all unsure of your competence to fit a bridle, ask your local Best retailer to fit your bridle.

How do I perform a self-rescue with my Kahoona?

Opinions on the best method to self rescue vary. If you believe that you stand a good chance of being seen with your kite and retrieved either by another kiter or by boat, then you may feel happier keeping your kite fully inflated. An inflated kite is highly visible on the water and will act as a visual marker for any potential rescue.

If the wind has switched to an offshore direction having your kite inflated at this point will only drag you further out to sea, so is not recommended in this instance that you leave your kite inflated. If you intend to swim back to shore under your own power, then you need to pack down your kite as follows.

If possible, release the OSR handle to flag the kite and wind the lines onto the end posts. With the lines wound in and any flying lines secure, release the LE deflate bladder and taking the kite by the wingtips, roll it to the center, expelling air from the LE as you progress. Be careful that you do not allow water to seep into the LE. Once the LE is deflated, re-secure the LE valve, secure the kite to your board with your bar leash, and paddle back in.

Inflation:

Best Kiteboarding kites are shipped with a hand operated pump, we selected these pumps because it is very difficult to over inflate the kite with a manual pump. Your Kahoona should be inflated to between 9-10PSI

NB: Best kiteboarding will not be responsible for any damage that occurs due to the use of a pressure hose/compressor when inflating your kite.

Where do I go for extra information on my Kahoona?

Your local Best Kiteboarding retailer has been trained in all aspects of the products they sell and can help you with any queries you may have regarding all Best Kiteboarding products. You may also contact Best Kiteboarding customer support via our website. For any general questions about using Best Kiteboarding products, or to chat with other kitesurfers and to find out all the latest info about everything Best Kiteboarding, visit the website <http://www.bestkiteboarding.com> or log onto the online user forums at <http://forum.bestkiteboarding.com>

Request for additional information and updates to the product manuals should be sent to simon@bestkiteboarding.com