

TRAINER KITE

manual

The logo for Ocean Kite, featuring a stylized white 'S' shape with a horizontal bar through it, set against a dark, textured background. Below the logo, the words 'Ocean Kite' are written in a bold, white, sans-serif font.

Ocean Kite

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Trainer Kite Instruction Manual

Thank you for purchasing an Ocean Rodeo trainer kite. Our trainer kites are primarily designed as learning aids for kite boarding, snow kiting and land kiting. However it is also very popular and fun to fly these kites as sport traction kites without any intention of progressing into a board sport! Kite flying is FUN!

Important Notice

This is not a kite boarding instruction manual, nor does it eliminate the necessity for obtaining professional instruction in the sport of traction kiting. The user is therefore advised to obtain such instruction as well as familiarizing him/herself with the information contained in this manual prior to flying this kite. Complete instruction may be obtained at an authorized Ocean Rodeo kite dealer. For information on lessons in your area go to www.oceanrodeo.com.

These trainer kites are not toys. People under the age of 16 should not use this kite.

Caution *Safety Warning: kite powered sports can be very dangerous and physically demanding. The user of this product should understand that participating in kite powered sports may involve serious injury or death and agrees to observe the following safety precautions:*

- Get instruction specific to the type of kite power craft.
- Obtain first aid training and carry first aid and safety/rescue devices.
- Consult your physician prior to beginning kite powered sports training.
- Always wear a nationally approved personal flotation device when using a kite on water.
- Always wear a helmet.
- Dress appropriately for weather conditions; cold water and/or cold weather can result in hypothermia.
- Check your equipment prior to each use for signs of wear or failure.
- Never kite alone.
- Do not kite in overpowered, gusty wind conditions.
- Do not kite in offshore wind conditions.
- Before launching from an unfamiliar site be aware of any dangers (rocks, reefs, currents, changeable weather, etc).
- Scout unfamiliar sites before launching.
- Never launch from an area with any obstacles closer than 2 line lengths downwind (people, rocks, etc).
- Do not kite near power lines!
- Do not ask a non-kiter to assist in the launching or landing of a kite.
- Do not launch kite while hooked into a harness!
- Always use the kite with a functioning safety system.
- Always prevent kites from inadvertently launching on land by weighting with sand, gravel, etc.
- Always announce when you are going to launch your kite so people can be prepared to move in the event of a gust or a problem.
- Disable an unattended kite by removing the lines, and then placing the kite leading edge down, facing the wind, and weighting with sand, gravel, etc.
- Do not exceed your kiting ability; be honest with yourself.
- You must not use alcohol or mind altering drugs prior to using this product.

SET UP

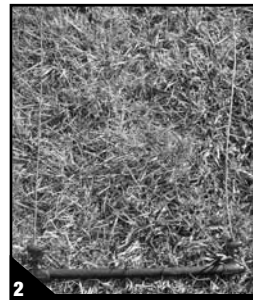
Ram Air Trainer Kite

Open Bag and identify parts

- Kite, bar with leaders and lines [1]



Remove bar from bag and unwind the leaders (red and green line)



Lay bar on ground with the red leader side on the left [2].

Note on kites of all types – red is left.

Tip: red is always left (port) and green is right (starboard), terminology borrowed from boating.

Take the lines and unwind them, starting by the bar and walking away.

Tip: it is easier to unwind your lines while walking downwind, this avoids your lines blowing sideways and twisting together.

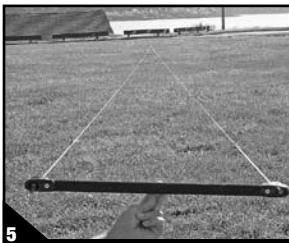
Attach lines to the bar by using a knot called the “lark’s head”. This knot is used to attach all lines. To make this knot, open the loop at the end of the line and then push the line through the loop. To attach the flying line to the leader, slide the loop of the lark’s head knot over the 1st knot at the end of the leader and then pull the flying line



to tighten the lark’s head knot against the knot on the leader. Repeat for the other side [3].

Line Length Adjustment.

Now that your lines are connected to the bar you must make sure the lines are equal in length. To check your line length, affix the line ends a fixed point, (a friend can hold ends together, or you can hook over a fixed point such as a screw driver placed firmly into the ground [4]. When you pull and place tension on the lines, the bar should be square (perpendicular) to the end of the lines [5]. If the bar is at an angle, you can micro adjust the line length by moving one of the lines up or down the leader knots [6]. More radical adjustments can be made by adding additional knots to your leader lines.



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Connecting the Kite.

Take the kite out of the bag and unfold. The side of the kite that has all the lines (bridling) on it is the bottom. The edge of the kite that has the opening between surfaces is the front.

Lay the kite on the ground – bottom side up and with the front edge downwind. [7]

Weigh the back edge of the kite with sand or gravel etc. [7]

Undo the left Velcro tab and remove the leader. [8] Keep hold of this leader as this will keep the bridles from tangling.

Using a lark’s head knot, attach the left (red) flying line to the knot on the left kite leader. [9]



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Repeat steps for the right side.

Note: Once the leaders are attached to the flying lines they won’t tangle. When not attached to flying lines, make sure to reattach the leaders to the Velcro tabs on the kite.

Now your kite is ready to fly! [10]

Go to page 14 for instructions on how to fly your kite.



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Packing up

Tip: Make sure kite is secure on the ground and that any twists in the kite lines are undone as this will make the next time out easier.

Winding up you lines

Holding the bar in one hand, take the other hand and grab the two leaders and pull tight. Pass lines over one end of the bar then back over the other end in a “figure 8” motion. This winding motion will keep twists out of you lines. Work your way up to your kite [11]

Once you reach the kite you have 2 options;
1) Leave the bar and lines connected or 2) undo the lines.

To leave the lines connected, keep figure 8-ing the lines until you get to

the kite leaders [12]. Now lay your bar on the kite (be careful not to spin your bar) [13] and roll the kite up around the bar. [14] Store in the bag.



To disconnect the lines from the kite, lay the bar down and undo the lark's head knots that connect the lines to the leaders on the kite. As you undo one side make sure to hold the leader and then attach the leader to the Velcro tab [15]. Repeat on other side.

Figure 8 the rest of the lines around the bar and then secure it with a few wraps of the end of the flying line [16]

Fold the kite in half with the bridle on the inside (to avoid tangles) [17]. Store in bag [18].



Stinger 1.8m LE Inflatable 4 Line Trainer Kite

Open bag and identify parts [1]:

- Kite
- Pump
- Bar with leaders and lines



Remove the bar from the bag and unwind the leaders (red and green lines) and the center trim strap.

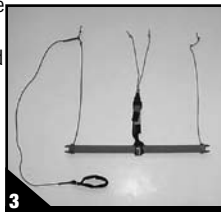
Note make sure that the wrist leash is attached to the red leader between the 2 knots [2]. Lay the bar on the ground with the red leader side on the left [3].

Note on kites of all types - red is left

Tip: red is always left (port) and green is right (starboard), terminology borrowed from boating.

Take the lines and unwind them, starting by the bar and walking away.

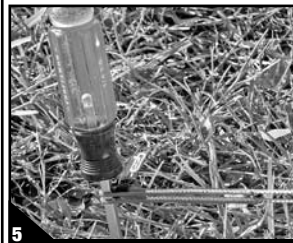
Tip: It is easier to unwind your lines while walking downwind (wind on your back) as this prevents your lines from blowing sideways and twisting together.



Attach the lines to the bar by using a knot called a 'lark's head'. To make this knot, open the loop at the end of the line and then push the line back through the loop. To attach the flying line to the leader, slide the loop of the lark's head knot over the 1st knot at the end of the leader and then pull the flying line to tighten



the lark's head knot against the knot on the leader. Repeat for the other side leader and for the 2 middle lines [4].



Line Lengths adjustment

Now that your lines are connected to the bar, you must make sure that the line lengths are all equal in length. To check your line length, affix the 4 line ends to a fixed point (a friend can hold the ends together, or you can hook over a fixed point, such as a screwdriver placed firmly in the ground [5]).

When you pull the bar and place tension on the lines, the bar should be square (perpendicular) to the end of the lines and all line lengths should be equal [6].

Note make sure that the center line trimstrap is extended completely [7]. If the bar is at an angle or the



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line lengths are not equal, you can adjust the line lengths by moving the lark's head to a different knot on the leaders [8]. More radical

adjustments can be made by adding additional knots to the leader lines.

Assembling & connecting the kite

Take the kite out of the bag and unfold. Place it on the ground so that the struts are up [9].



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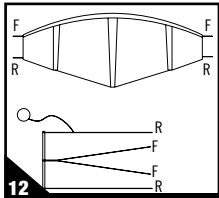
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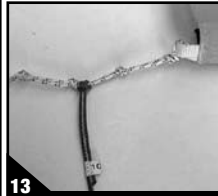
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Starting on one wing tip, pump the strut up until it is firm (hard to the touch) [10]. Close valve and secure velcro. Pump up next strut (center) and then the other wing tip strut. Now pump up the front (leading edge) tube. Make sure that this is pumped up firmly otherwise the kite will not fly correctly. Now roll the kite over so that it sits leading edge down and pointed into the wind. Weigh the kite down with some sand or gravel, placed on the front of the kite. [11].

To connect your flying lines to the kite it is best to have your lines laid out so there are no twists or tangles in them [12].



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The front lines on the kite are the ones that are attached to the trim strap on the center of the bar. The rear lines are the ones that are attached to either side of the bar. Using a lark's

head knot attach one line at a time to the pigtails on the kite [13]. Start on one side and connect the outside (rear) line to the rear pigtail on the kite. Then connect the center (front) line to the front pigtail. Repeat on other side.

Tip: Attach the lines to the same knot on all pigtails.

Now your kite is ready to fly!

Packing up

Tip: Make sure that the kite is secure on the ground and that any twists in the kite lines are undone, as this will make the next time out easier.

Winding up the lines

Disconnect the flying lines from the kite. Go back to the bar and hold the bar in one hand. Take the other hand and gather the lines together and while pulling tight, pass lines over one end of the bar and then back over the other end of the bar in a 'figure 8' motion [14]. This winding motion will keep twists out of your lines. Work your way up to the ends of the lines. Now take the wrist leash and wrap it around the bar, securing the lines, and use the velcro strap to hold it in place. Turn the kite over and release the air in the leading edge tube and struts, by opening the valves and squeezing the base of the valve [15]. Fold the kite in half and then roll up. Fold in half again. Store kite, bar and pump in pockets of bag. Before flying your kite you must learn the basics to kite. See Kite flying theory on page 14.



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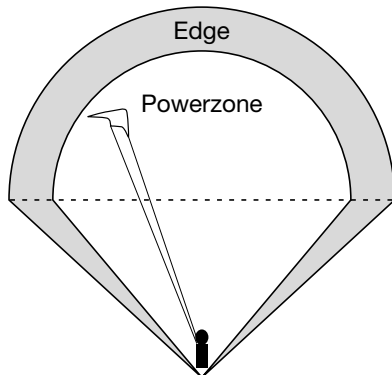
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Wind window

An imaginary arc about 160 degrees in front of you in which your kite will fly. This area grows (in gusts) and shrinks (in lulls) depending upon the strength of the wind, the kite you are flying, your skill level and any obstructions that are behind you which can also affect the size and workability of your window.

POWER ZONE: This is the area directly in front of you (down wind) in your wind window. This is where the kite has its best speed, maneuverability and most pull. The size of this area is also affected by the wind speed.

EDGE: The imaginary line in the sky that defines the limits of the wind window. It is the farthest out point extending from your left side, over your head and over to the right of the wind window. To find the edge, fly your kite to the side or overhead. The kite will slow down and then stop and hover as it reaches the edge.



Use Clock terms instead of angles from the beginning

- 0 degrees (ground level) = 9 or 3 o'clock; 90 degrees = 12 o'clock; 45 degrees = 10:30 or 1:30
- The higher performance the kite the wider the wind window will be.
- Wind window is a 3 dimensional half-dome region that the kite flies within.

Power of the Kite

Respect the kites power or pay the price

- The power of the wind is proportional to the square of the wind speed.
- Therefore, in a 16 knot wind your kite will have 4 times more power than in 8 knots, even though the wind speed has only doubled.

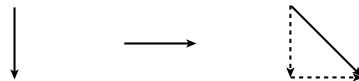
Wind Speed (knots)	Power of kite
4	1 unit of pull
8	4 times greater
16	16 times greater
32	256 times greater

- A kite traveling in the wind window receives lift from both 1) the real wind and 2) the apparent wind.
- The power that the kite produces while in motion is dependent on the relation between the speed of the kite and the true wind

The concept of **Apparent Wind** is important for an understanding of how the kite generates its tremendous power.

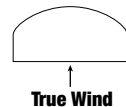
The **Apparent Wind** that the kite feels is the vector sum of the **true wind** (speed and direction) and the **kite's motion** (velocity and direction) in the wind window.

True Wind + **Kite motion** = **Apparent Wind**

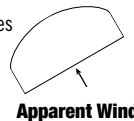


This is why the kite generates different amounts of power depending on its position in the wind window.

- **Static window:** when the flyer is standing still. The movement area of the kite does not change.



- **Dynamic window:** as a rider on a board moves, the wind window rotates due to the rider's movement. Wind window is now oriented to the Apparent Wind direction.



Site Analysis

Before each and every session, even if you always use the same site there are several factors that must be considered before flying your kite

Weather

- Weather and Wind Forecast for the day.
- What site has the best wind set-up?
- Is there thunderstorm potential?

Local variations

- Is the wind turbulent or gusty at the site?
- Is there the potential for rapidly increasing or decreasing wind strength?
- Are there trees, power lines or other obstructions down wind?
- Is the beach or field busy today?

Pre-flight Check

To ensure the good working condition of your equipment and to avoid any problems due to improper set-up or wear, all equipment must be checked before each take-off.

Kite

- No tears, separated seams.
- Check for wear in leader lines and that knots are tight.
- Inflate wing before running out lines to ensure that there are no leaks in bladders.
- Proper bladder pressure, firm but not drum hard.

Bridles

- Check for abrasion and tangles.
- Make sure adjustments are symmetrical.
- Inspect bridals for wear.
- Adjust kite trim for current wind conditions.

Flying Lines

- Knot free
- In good condition.
- Check for stretch (equal line lengths) if they are relatively new.

Bars

- Check for leader line wear.

FLYING THE KITE

Ram Air Trainer Kite

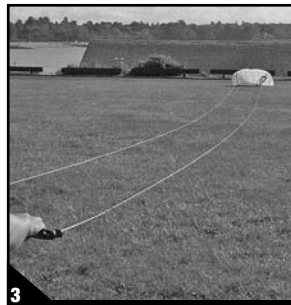
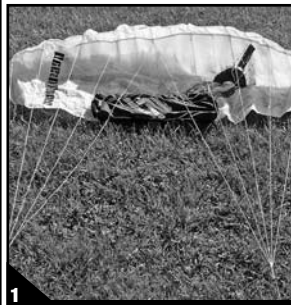
Self-Launching the Kite

With your knowledge of the wind window and flying sites find a steady light breeze to fly your kite: Set up the kite with the bar upwind and the kite downwind.

To launch the kite solo, set the kite in a position where

the front of the kite (vents) is raised slightly [1]. You may need to weight the rear of the kite with some sand (or weight bags) to hold it in place.

Go to the bar and hold with both hands (place your hands near either end of the bar ends) [2]. Take up the slack in the lines by walking backwards. When ready give a slight pull on the bar and the kite will rise off the ground and start flying [3].



Launching the Kite with an assistant

Set up the kite with the bar upwind and the kite downwind.

Have your assistant hold the kite in a position where the front of the kite (vents) is raised skyward, make sure they are standing on the downwind side of the kite [4].

Go to the bar and hold with both hands (place your

hands near either end of the bar ends) [5]. Take up the slack in the lines by walking backwards. When ready give a slight pull on the bar and at the same time yell to your assistant to release the kite. The kite will rise up and start flying [6].



Steering the Kite



right arm. Make sure after turning the kite to return arms to the straight position.

First off, make sure that you keep your arms straight out in front of you [7]. Your arms should follow in the same direction as the kite lines and the bar should always stay horizontal.

To turn the kite simply pull the bar, bending one arm only [8]. To turn left bend (pull) your left arm. To turn right bend (pull) you

Relaunching after crashing. (Yes, you will crash!) Have your assistant hold the kite in the launching position. Check to see if the lines are twisted. If they are have the assistant rotate the kite, or you rotate the bar to take the twists out. Relaunch as normal. If you crash without an assistant to relaunch, you will have to place down bar and set up kite for self launch (see Self Launching your kite).

Landing the Kite

To land the kite, fly to the edge of the wind window (out to left or right side) and slowly turn the kite so that it fly's down to the ground. [9]

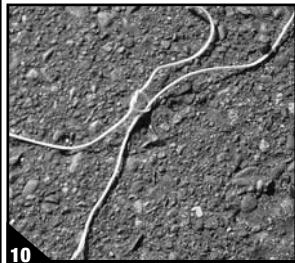


Kite care and maintenance

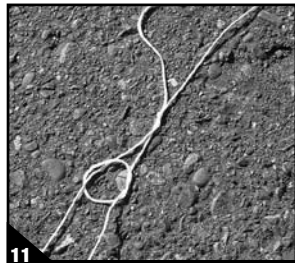
Broken Lines

Try not to store the kite for long periods of time if it is wet. Take it out of the bag and hang to dry before prolonged storage. Remove sand and other debris from the kite by holding the rear edge of the kite and shaking it so debris falls out from the vents. Check bridles and make sure they're not twisted or tangled, and that leaders are secured in place by the Velcro tabs.

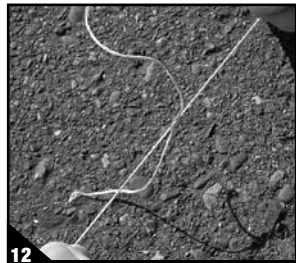
If you break a flying line they can be fixed by tying it back together using a special knot. Lay the two ends beside each other so they overlap by about 6". Tie an overhand knot (square knot) on the end of one line over the other line. **[10]** Repeat on the other end of the opposite line **[11]**. Pull the two ends of line together **[12]**. Now your line is fixed, it will be shorter than the unbroken line, so you will have to correct the line lengths (see adjusting your line lengths)



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FLYING THE KITE

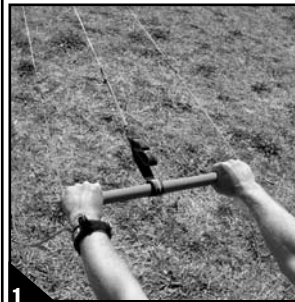
Inflatable Trainer Kite

Launching the Kite

With your knowledge of the wind window and flying sites find a steady light breeze to fly your kite. Set up the kite with the bar upwind and the kite downwind.

Attach the wrist leash to your left wrist and pick up the

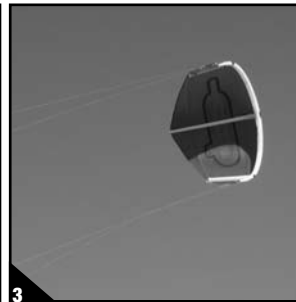
bar. Place your hands near either end of the bar **[1]**. Have a friend pick up the kite holding it in front of them by the front leading edge tube with the kite pointed to the side **[2]**. Take up the slack in the lines by walking backwards. Check to make sure that the lines are not crossed or twisted. When ready give a slight pull on the bar and yell to your friend to release the kite **[3]**. The kite will now be flying.



1



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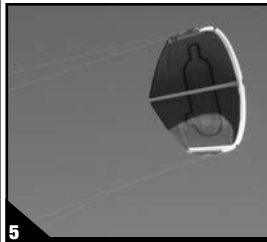


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Self launching the kite



Set the kite up with the bar upwind and the kite downwind. Turn the kite over and then fold one wing tip over on itself and weigh with sand or gravel [4].



Tip: fill a bag with sand and use as a weight for self launching. Make sure that the flying lines are free and clear of the kite. Go back to the bar and attach the wrist leash to your left wrist. Pick up the bar. Place your hands near either end of the bar. Take up the slack in

the lines by walking backwards. Check to make sure the lines are not crossed or twisted. When ready give a slight pull on the bar and the weight should come off the wing tip [5] and the kite will start flying.

Steering the kite

First off, make sure that you keep your arms straight out in front of you [6]. Your arms should follow in the same direction as the kite lines and the bar should always stay horizontal.

To turn the kite simply pull the bar, bending one arm only [7]. To turn left bend (pull) your left arm. To turn right bend (pull) your right arm.

Make sure after turning the kite to return arms to the straight position. Relaunching after crashing. (Yes, you will crash!) Have your assistant



normal.

If you crash without an assistant to relaunch, you will have to place down bar and set up kite for self launch (see Self Launching your kite)

hold the kite in the launching position. Check to see if the lines are twisted. If they are have the assistant rotate the kite, or you rotate the bar to take the twists out. Relaunch as

Landing the kite

To land the kite, fly to the edge of the wind window (out to left or right side) and slowly turn the kite so that it fly's down to the ground. [8]



Kite care and maintenance

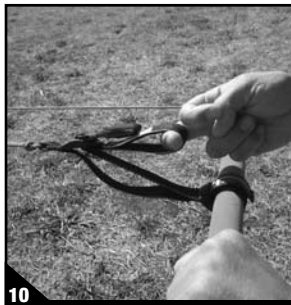
Do not store kite for long periods of time if it is wet. Take it out of the bag and hang to dry before prolonged storage.

Trimming the Kite

As your kite is set up with 4 lines, it is possible to trim the kite to control its flight characteristics. The trim strap that is on the center of the bar controls the length of the front lines [9] varying the length of the front lines changes the angle at which the kite flies through the air. If the kite is hard to launch and doesn't want to fly forwards, shorten the front lines by pulling on the trim strap [10]. This will also reduce the power that the

kite creates. Lengthening the trim strap will increase the power that the kite creates [11].

Once you are comfortable flying the kite, play with different settings on the trim strap and you will learn how it affects the kite's performance.



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Fixing a bladder

If you have a leak in one of the bladders, remove it and patch with the supplied patches.

To remove a bladder, attach a piece of line to the valve [12]. Push the valve into the strut. Open the velcro flap at the end of the strut [13] and pull the bladder out. Disconnect the line that is attached to the valve but do not remove the line from the strut.

Pump the bladder up and use soapy water to find the

hole (look for bubbles). Mark the hole with a marker. Rinse bladder with clean water and patch with supplied peel and stick patches.

To reinsert the bladder, reattach the line to the valve [14] and feed bladder into end of the strut. Make sure that the bladder has no twists as it goes into the strut. Reseat the valve in the opening [15 see next page] and close the velcro flap at the end of the strut [16 see next page]. Pump the strut up slowly to make sure that the bladder is seated correctly.



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Warranty

All standard Ocean Rodeo products are covered by a One Year Warranty offered to the original purchaser on workmanship, with a One Year Warranty on materials. Warranty is limited to the repair or replacement of Ocean Rodeo product at our option. The warranty does not cover damage caused by normal wear and tear, fading, misuse or negligence, but not limited

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to punctures, sun exposure, seam failure due to over inflation, damage in the sun, damage caused by use in waves or shore break, and damage caused by anything other than defects in material and workmanship. This warranty is invalid if unauthorized repairs have been carried out. Repairs or alterations not covered by warranty will be billed to the customer. Factory seconds and clear out products sold at a discount carry no warranty.

Warranty Registration No. _____

Name _____

Age _____

Sex Male Female

Address _____

City _____

State/Province _____

Country _____

Postal Code/Zip _____

Email _____

Store Name _____

Date of Purchase _____

What is your product primarily used for? Kiteboarding Snowboarding Landboarding Other
 Surfing Wakeboarding Paddlesports

How did you hear about Ocean Rodeo? Dealer Friend Trade Show
 Internet Television Magazine Ad/Article


What is your other favorite sport? Skiing Windsurfing Climbing Surfing
 Hangliding Snowboarding Mountain Biking Wakeboarding

Why did you purchase from Ocean Rodeo? Quality Fit Design/Style
 Availability Price Reputation

Please write any other comments or questions you may have _____

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