



USER GUIDE

Table des matières

Acknowledgements	2
Preliminary notes	3
Presetting the LibertyKite® :	5
LibertyKite® shipping phases	7
Stabilisation of LibertyKite	11
Adjusting the direction of the ship	13
LibertyKite® downwind (or wide beam) configuration	14
Navigation	15
Recuperation du LibertyKite®	16
Emergency manoeuvre	18
Warranty	19
Disclaimer of Liability	20
Assumption of Risk	20
Disclaimer of liability and waiver of claims	20
Security	21
Disclaimer	21
Important safety rules	21
Weather conditions	22
Choice of area of use	23
Risks associated with lines	23
Maintenance	24
Terms and conditions of sale	24

Acknowledgements

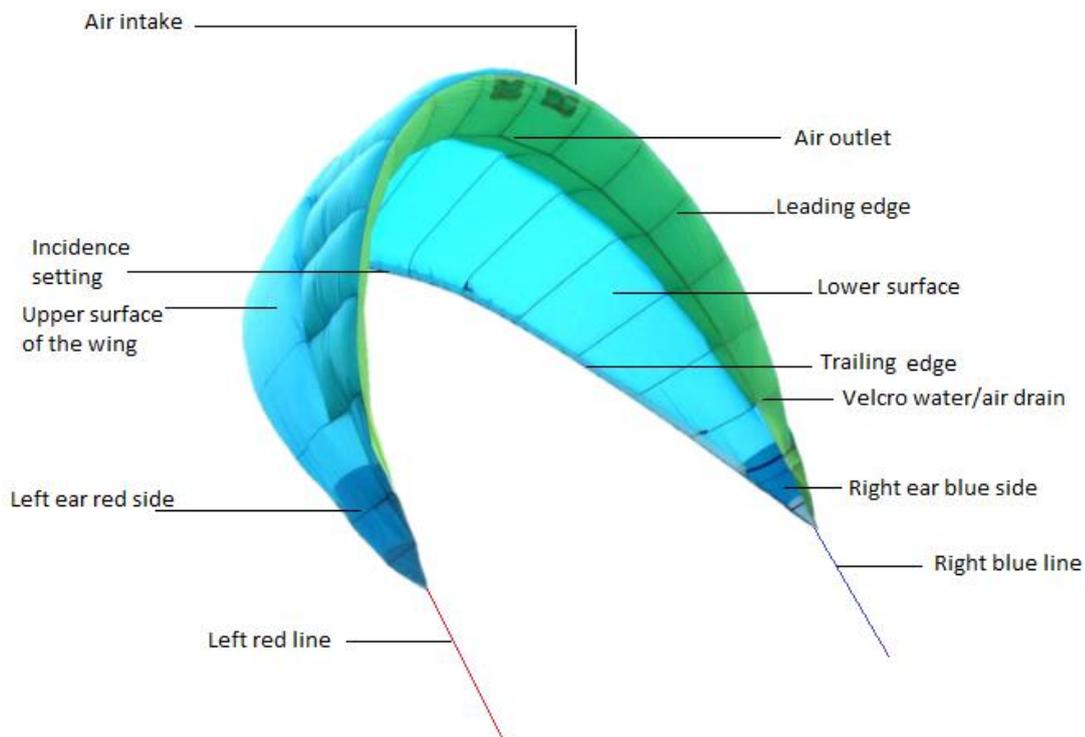
Thank you for purchasing a LibertyKite®. Our mission is to build and develop easy-to-use rescue kites for all levels of kite flyers. Easy to use, these wings will give you a new pleasure of navigation, whatever your level of practice. These wings can also be used as an emergency means of propulsion in case of dismasting or engine failure.

At OCEA, we are passionate about sailing and kitesurfing. It is this passion that drives our design team to create products that we love to use.

We take pride in the quality of our products. We are constantly searching for the best materials available. All our products are manufactured in our workshop in the Arcachon basin, which guarantees superior quality control. This quality of construction will ensure a long life for OCEA products while keeping their original qualities.

Preliminary notes

LibertyKite® is made up of several important elements to keep in mind. All of these elements are shown in the following figure.

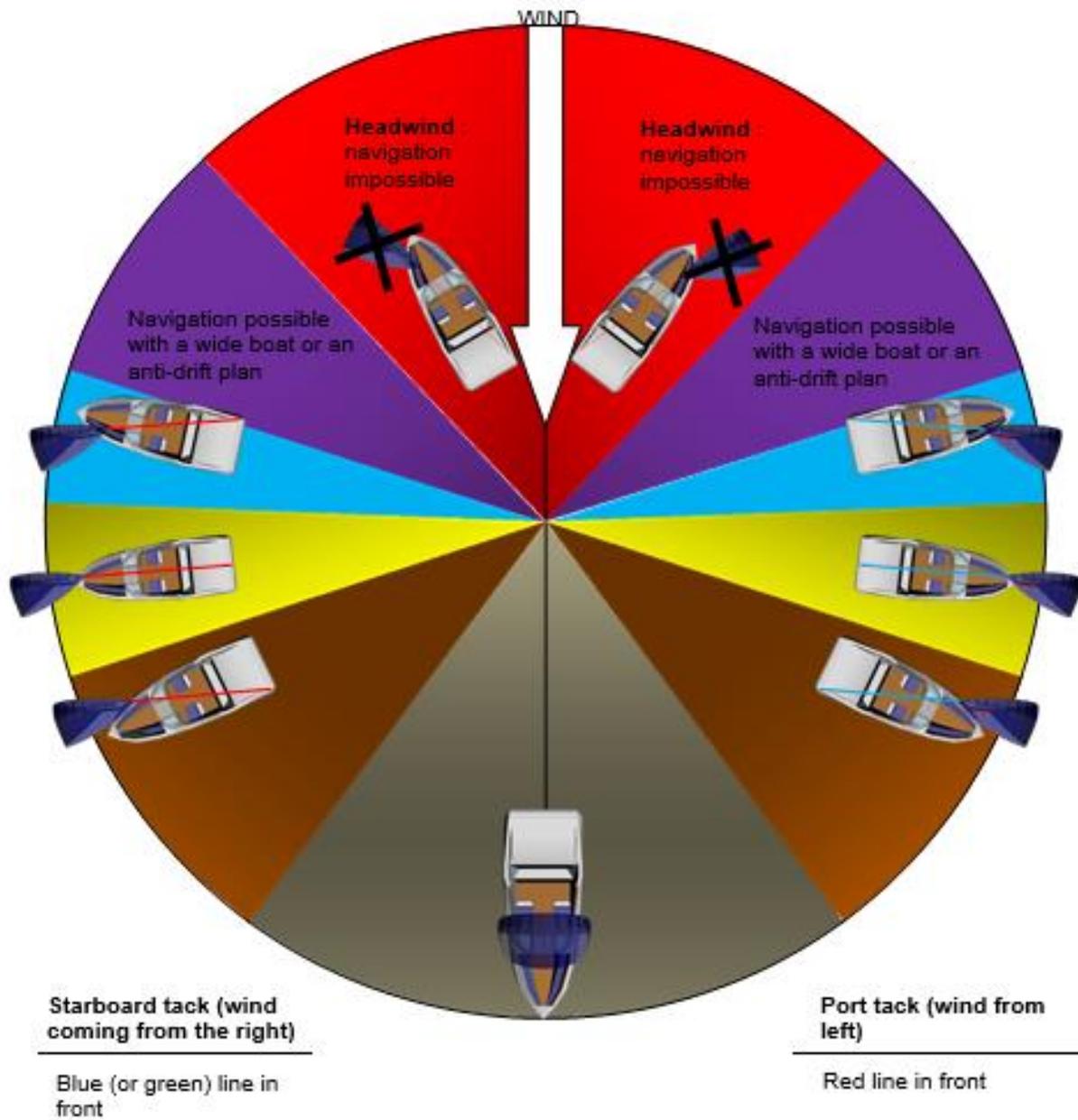


LibertyKite® description

Before launching the LibertyKite®, it is important to visualize the configuration of the boat in relation to the wind. Indeed, the direction of the wind in relation to the LibertyKite® does not change according to the desired direction of advance, the LibertyKite® will therefore be attached differently in relation to the boat in order to keep it well oriented in relation to the wind. Depending on the chosen tack (port or starboard), we will invert the attachment lines of the LibertyKite®. This is illustrated in the following wind rose.

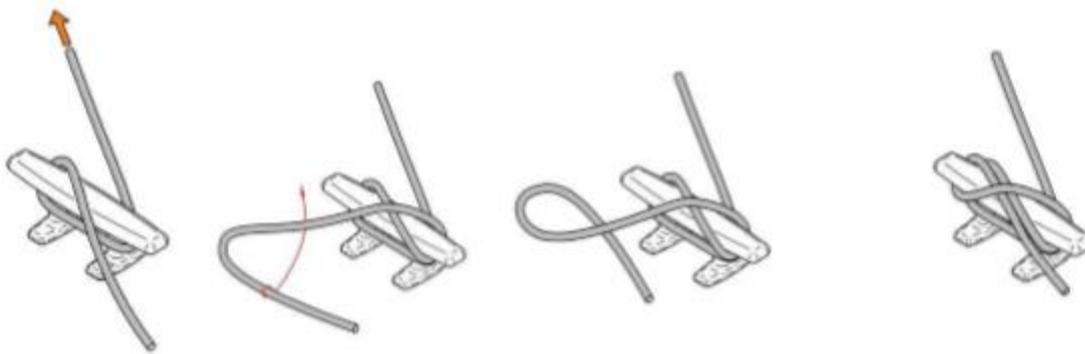
In the wind rose, the boat's drift has not been considered. This depends on the anti-drift plan of the boat. For a boat without an anti-drift plan, it will be more difficult to go upwind.

The LibertyKite® has been designed for use between 10 and 20 knots.



LibertyKite® settings:

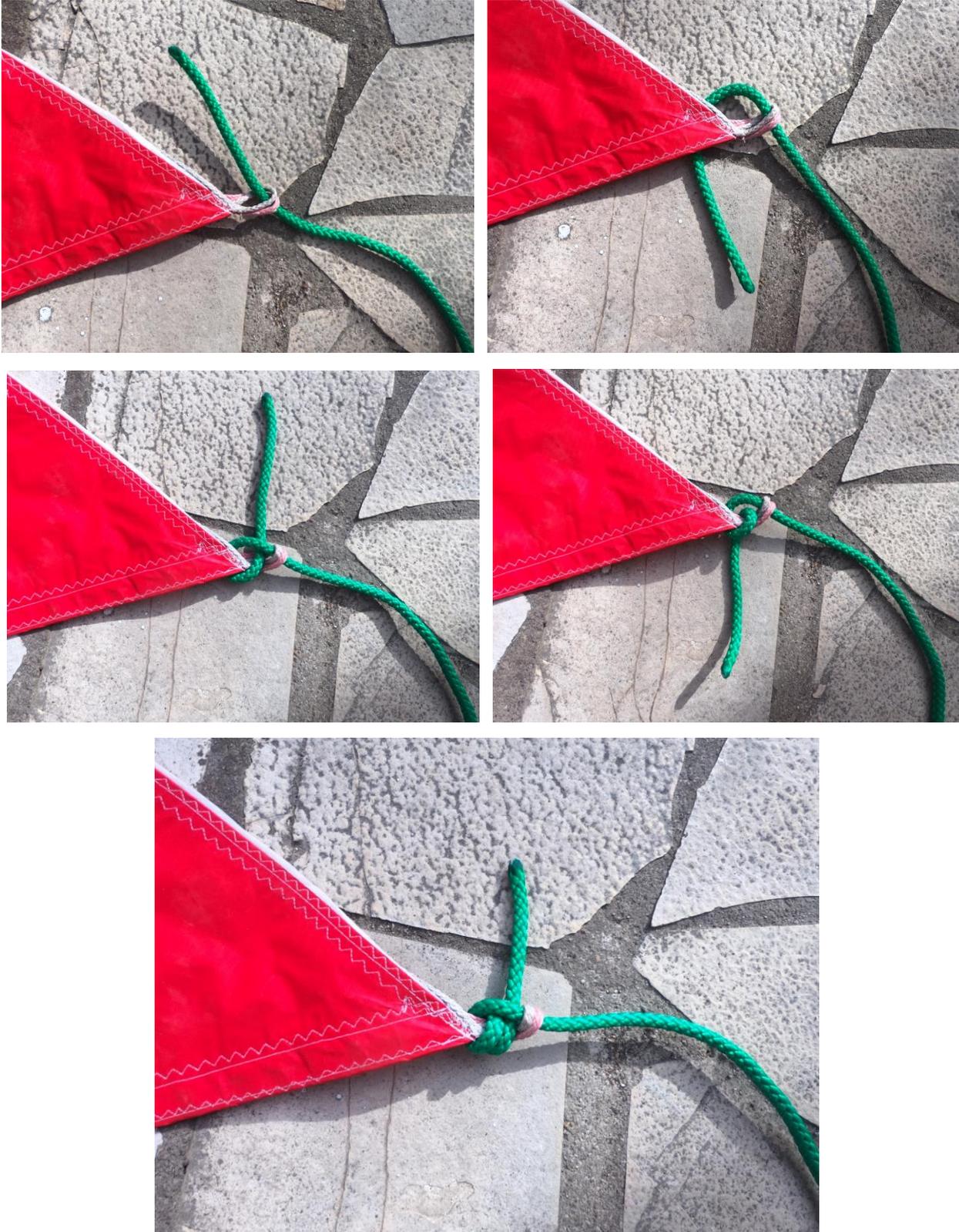
- Put the boat in neutral and abeam to windward, making sure that there is enough water to run downwind (i.e. the possible shoreline the vessel would be heading towards is far enough away so as not to pose a danger of being driven ashore). In general, ensure that there is sufficient leeward clearance and that no obstructions can pose a danger.
- Be careful not to let the lines go overboard even though they are floating, they present a possible risk of getting caught in the propeller or rudder. Very often the propeller turns to neutral with the boat's centreboard.
- Leave the LibertyKite® in the bag and take out the lines
- Take the forward line (blue line if on starboard tack (wind is from the right) or red line if on port tack (wind is from the left)) on a cleat at most, leaving the forward end of the LibertyKite just above the foredeck. To attach the LibertyKite® to the boat, it is possible to use the mooring cleats to secure it. Other points can be used if required but it is important to ensure that these attachment points are strong. To attach the LibertyKite® to the boat, tie a cleat knot with the line as shown in the diagram. It is advisable to multiply the eight knots around the cleat before tightening the line, to facilitate the future release.



Half key for attaching the line to the boat with a cleat knot

- Take up the back line on a back cleat (if possible higher than the front cleat) of a length between zero length (flush with the splice) and a length equal to the distance back cleat - front cleat. A short back line makes shipping easier but the LibertyKite has more wind grip during the preparation period.
- Remarks
 - Attaching the lines to the cleats on the windward side minimizes the risk of LibertyKite® falling over in the water.
 - The leading edge must be on the windward side (the side from which the wind is coming)

Before launching the LibertyKite®, connect the lines to the LibertyKite® using a lark's head knot such as shown in the pictures.



Line attachment to LibertyKite® with a lark's head knot

LibertyKite® shipping phases

Before any handling of the kite, please refer to the safety rules (wearing gloves, shoes etc...), as indicated in this manual on pages 19 and 20, which must be observed especially during the phases of flight and recovery of the kite. In particular, be very careful of any ropes that could fall into the water and get caught in the motor propeller. It is therefore advisable to stop the propeller during the launch and recovery phases.

Once the lines are set, the LibertyKite® sending can be divided into 4 main phases:

1. Inflation of LibertyKite®: Locate the air inlets and present them perpendicular to the wind to already bring in part of the air volume. Hold the LibertyKite® by the reinforcement line on the leading edge. Check that the exit is closed by the zipper.



2. To put the LibertyKite® in flying position in order to move it up: hold the LibertyKite® by the leading edge and pull the trailing (rear) edge at the ears. Flying the shortest part of the leading edge between one hand and the nearest clew. The other crew member flying the other part.



3. Drop the LibertyKite® by gradually releasing the fabric at ear level. Make sure that the lines are free of any movement and in particular that they are not wrapped around a limb or stuck in the clothing of a person sailing on the boat.





4. Gradually slacken the lines, leaving more length to the line attached to the rear of the boat so that the LibertyKite® pulls well forward. To slacken the lines, undo the half key of the cleat and let it go. Once the operation is completed, redo the half key to lock the cleat knot. This allows the LibertyKite® to tilt and pull further forward.



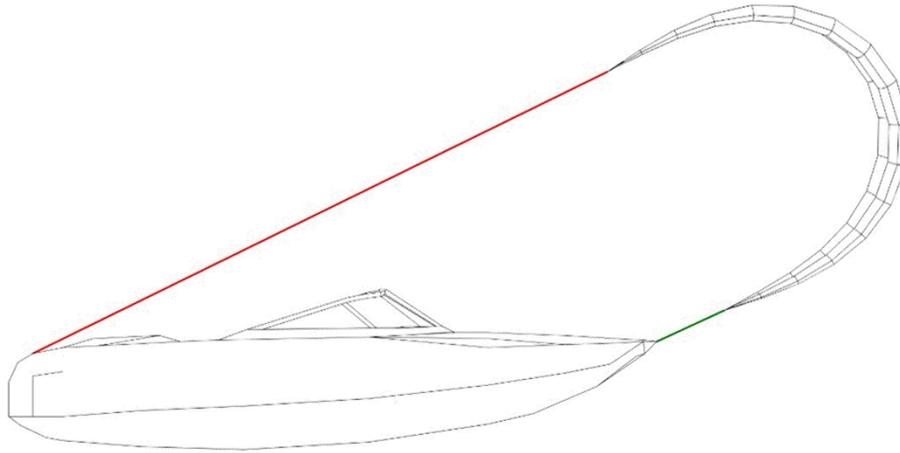
Launch configuration (traction, perpendicular to the LibertyKite®, is vertical)

Navigation configuration (traction, perpendicular to LibertyKite®, is tilted forward)

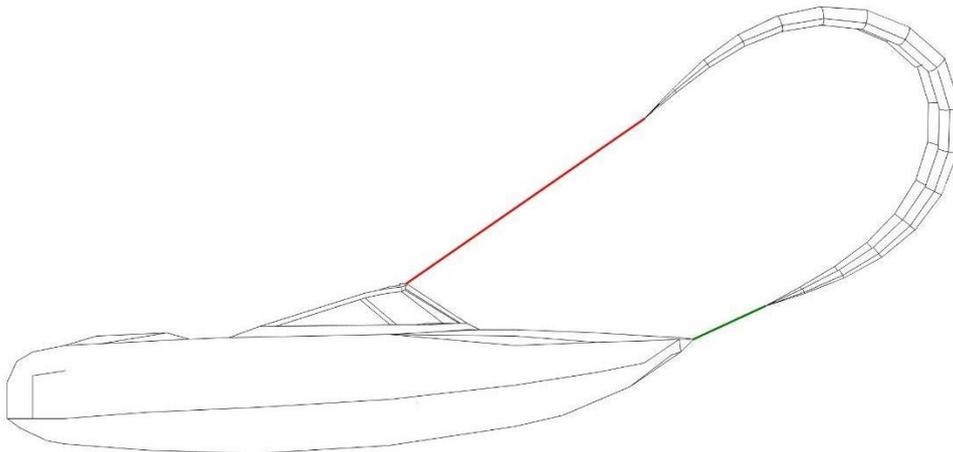


Stabilisation of LibertyKite

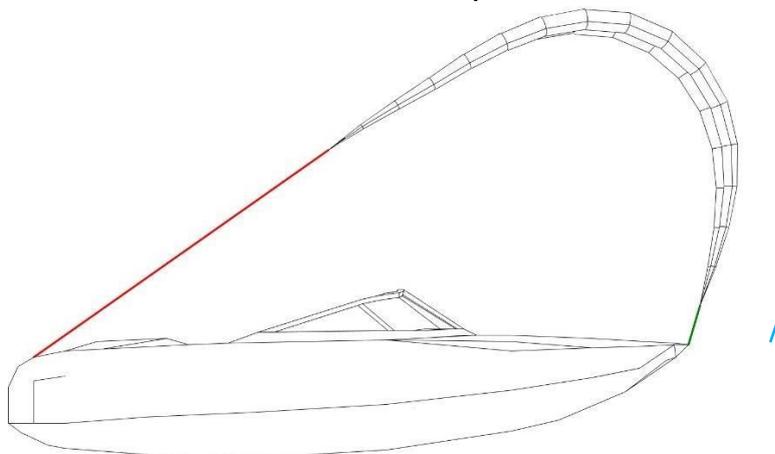
For LibertyKite® to be stable it is important that the two lines are substantially parallel (see diagrams following). Otherwise, it may start moving and may end up falling into the water.



Very parallel lines



Lines too closed (In this case, the LibertyKite will oscillate with greater amplitudes, attach the red line further back.)



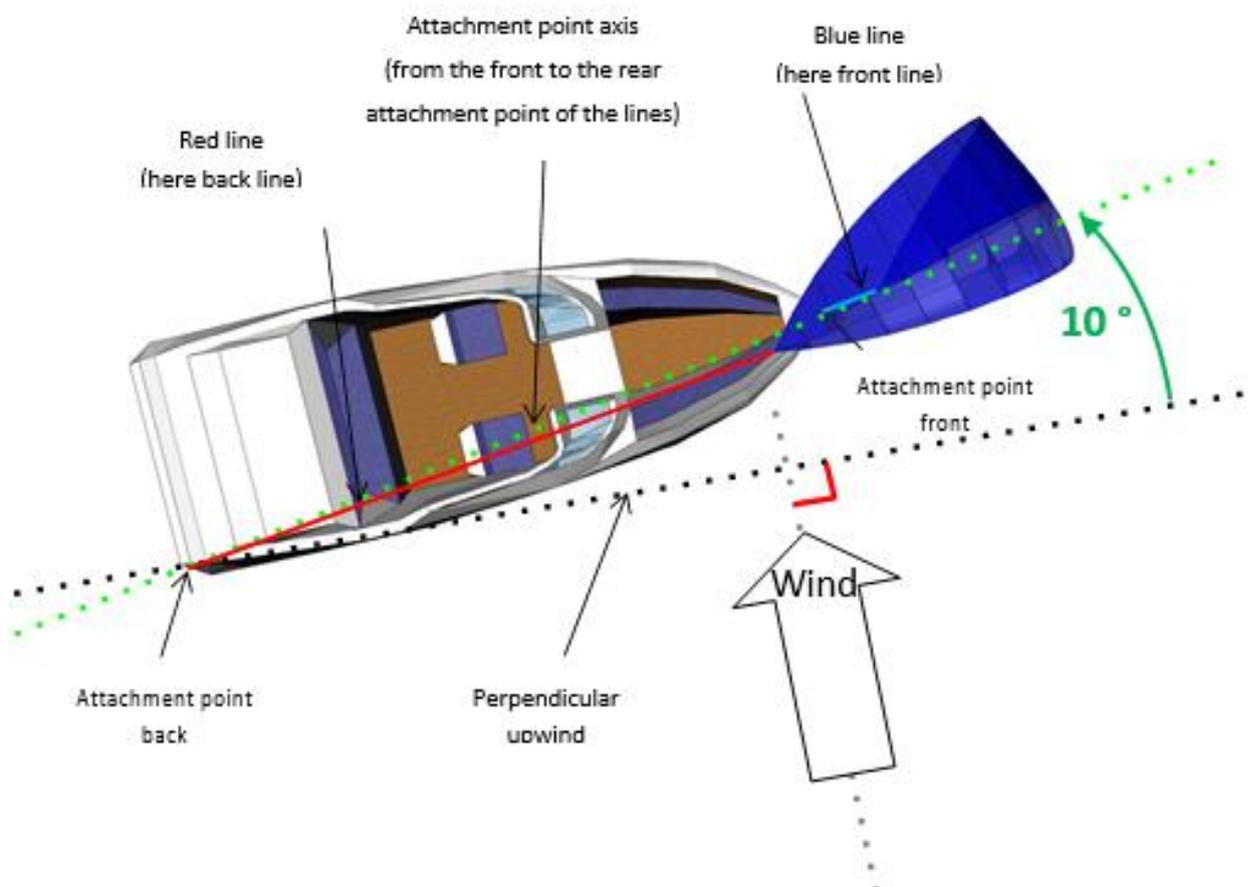
Line too open (In this case the profile of the LibertyKite's extrados is deformed and performance is reduced, lengthen the red back line or attach it further forward on the boat, or move back the forward

line attachment.)

Depending on the yaw balance of the boat (natural tendency to go to port or starboard), moving the line attachment backwards and downwind will make the boat want to go upwind (luff), moving the line attachment forwards or attaching it more upwind will make the boat go downwind (luff). You will then have to look for the right position to have a balanced boat (requiring the least possible correction at the helm or engine angle for a given direction of advance).

Adjusting the direction of the ship

Depending on the wind direction in relation to the boat, we will choose two attachment points on the boat: one at the bow and one at the stern offset laterally. The choice of attachment points depends on the wind direction. The axis of the attachment points that connects the two attachment points on the boat must be offset about ten degrees from the perpendicular to the wind as seen by the boat. The rotation of the axis of the attachment points shall be in the direction of the wind as shown in the diagram seen from above.



Attaches du LibertyKite® sur un bateau

For the same configuration (same angle between the centerline of the lines and the boat's centerline),

the longer the lines, the more latitude the boat can have on its course. However, an increase in the length of the lines results in a decrease in the line correction, and therefore a risk of instability of the LibertyKite. This will be all the more important if the stern cleat is at the same height or lower than the front cleat. With long lines the LibertyKite® will also fly in stronger wind but will be harder to bring back (line length) when landing or if it falls into the water. It will also be less sensitive to the movements of the boat. In light wind it is interesting to have the forward line attachment slightly more upwind (increase the angle between the perpendicular to the wind and the line attachment axis) to help the kite have an upward yaw angle.

LibertyKite® downwind (or wide beam) configuration

When the wind comes from eastern, it is possible to use the LibertyKite® to tow the boat. In this case, the two lines must be attached on each side, perpendicular to the axis of the boat, leading edge to the stern.

It is possible to go wide by slightly shortening the line on the cleat on the side where you want to go. If the pulling force is too great to shorten the line, it is possible to release the line on the opposite side, while respecting the safety instructions in this guide.



LibertyKite® downwind

Navigation

Once the LibertyKite® has been launched, care must be taken to keep the angle between the axis of the boat and the axis of the lines, otherwise the LibertyKite® may fall into the water. The most frequent case is when the boat is too low (too close to the downwind). In this case, the LibertyKite® tends to descend in a parachuting configuration. It is then necessary to loft (get closer to the axis of the wind) to make the LibertyKite® go up. The bigger the LibertyKite® is, the more latitude you must steer.



Configuration too low: the LibertyKite® starts to parachute and descends.

Recovery of LibertyKite®

Whichever method is chosen, the propeller should be stopped, if necessary, to prevent interference between the propellers and the lines.

Method 1: To retrieve, simply let go of one of the lines (the stern line for example), then retrieve the LibertyKite® from the line still attached to the boat.



Open the velcros to let the air out of the leading edge and fold the LibertyKite®.

Method 2: Another method is to prevent the LibertyKite® from falling into the water when the wind is light:

1. Orient the boat to the open water in order to position the LibertyKite® as far as possible above the boat. Take the LibertyKite® from the stern line to pass vertically over the LibertyKite®.



2. Recover some front line and then some fabric from the front ear and then smother the LibertyKite®. This manoeuvre must be carried out quickly enough so that the wind does not re-enter the LibertyKite®.



3. Open the velcros to let the air out of the leading edge and fold the LibertyKite®.

Emergency manoeuvre

In case of emergency, the release of one of the LibertyKite® lines causes an immediate drop in traction. In case of a problem, one of the two lines must therefore be released. The choice of one or the other line depends on the proximity of the lines and the environment (boats around, buoys, coast, dyke ...). Indeed, releasing the back line will make the LibertyKite® fall closer to the boat, or even on the boat depending on the configuration.

To release the lines, if you have enough time, simply undo the cleat knot of the line you wish to release. If there is not enough time or if the line has become stuck in the cleat, then the line should be cut with a sailor's knife, line cutter or sharp object. It is therefore essential to always have a means of releasing the LibertyKite® at hand in case of a problem.

As soon as a line is released, it must be retrieved from the line still attached to the boat as in the classic retrieval procedure. This immediate retrieval is intended in particular to prevent the risk of a line getting stuck in the engine propellers. It should be noted here that this risk, although real, is greatly minimised by the intrinsic buoyancy characteristics of the lines.

A bit like a sailboat sail that needs to be trimmed, shocked or twisted it is sometimes necessary to adjust the incidence and symmetry of the LibertyKite in order to achieve optimum performance. But for LibertyKite once trimmed it normally no longer needs to be adjusted.

This adjustment point is in the middle of the trailing edge of the LibertyKite. The stopper knot must be moved behind the stop ball so that the tuning line can be tightened or loosened. Be careful to hold the middle marker in place so that it is the same length on the right and left. Otherwise Libertykite will not fly symmetrically.

The normal range of this adjustment is a few centimetres. Ideally this initial adjustment can be done on land in a force 4 wind.

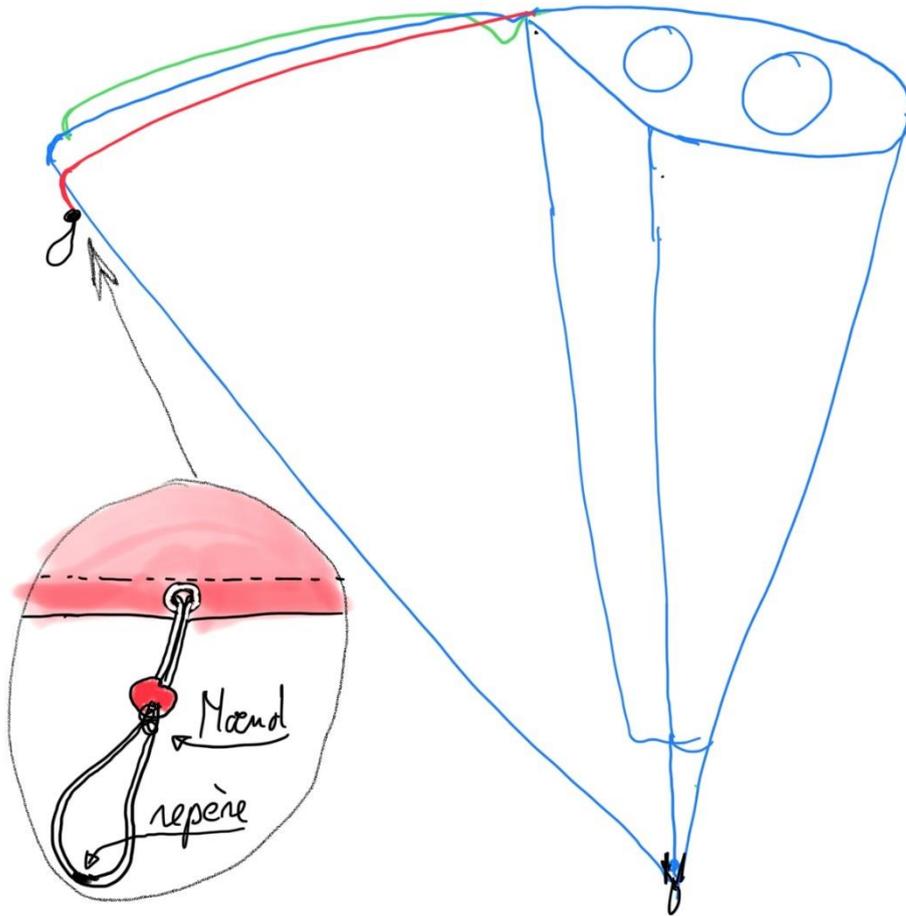
In normal flight conditions a very slight crease should appear just behind the leading edge from time to time. Blue profile of the sectional view.

If the incidence of a large fold behind the leading-edge box is too low, the upper surface can become very bent. Green profile of the sectional view. Take-off is easy but traction and stability are rather low. The pitch control line needs to be tightened.

If there are no folds on the upper surface and LibertyKite tends to want to fly in reverse (stall) which is not normal if there is enough wind. Red profile of the cross-section view. The tension on the trim line must be released.

If LibertyKite has so much difficulty to take off and falls backwards when there is enough wind (stall) the trim line is probably too tight.

- Ligne d'incidence Detendue: gros pli derrière BA.
- Trop tendue: risque de décrochage
- Bien réglée: Très léger pli en arrière du Bord d'attaque



Relaxed line of incidence: large fold behind the leading edge

Too tense: risk of dropping out

Well set up: very light rain behind the leading edge

Liability release

The assembly and/or use of this product implies that you have read and understood the entire instruction manual for this product, paying particular attention to the instructions and warnings, before using this product. Similarly, if a third party uses your product, it is your responsibility to ensure that this person has read and understood all instructions and warnings in the user manual for this product before using it.

Assumption of Risk

The use of this product and all its components involves certain risks and hazards that may result in serious injury to the user and to third parties (non-users). The use of this product means that you understand and accept all risks of injury, known and unknown, to you or to third parties, related to the use of this product. The risks inherent in the use of LibertyKite® can be reduced by following the instructions in the user manual and using good judgment.

Disclaimer of liability and waiver of claims

The purchase of this product implies that you accept, within the limits of the law:

- RENOUNCE ALL CLAIMS OF ANY KIND whatsoever that you have or will have in the future against OCEA and all parties related to the use of this product and its components.
- TO RELEASE OCEA, and all related parties, from any liability for any loss, injury, damage, injury or expense that you, or third parties using your equipment, may suffer for any reason whatsoever, including as a result of negligence.

Security

This User's Guide has been designed to be applicable to the widest possible range of vessels. Depending on your experience in marine navigation, and kite piloting, it may be advisable to request a "hands-on" training course on a ship's traction kite. Such individualized and specific training on the installation and use of the Liberty Kite on your vessel is offered by the company Océa. If you would like to benefit from them, please contact us at the following email address: libertykite@beyond-the-sea.fr.

The use of LibertyKite requires in any case to respect all the following safety rules:

Disclaimer

- Flying the LibertyKite® can be dangerous.
- Use extreme caution when using this product.
- Improper use of this equipment can cause serious injury.
- Be in good health when using this product.
- Do not use this product improperly. For example, do not
 - Jump
 - Anchoring to the ground
 - Anchor directly to the LibertyKite® via a harness or any other means of attachment.
 - Use the LibertyKite® for kitesurfing or any other practice using a kite of traction other than the traction of a boat.
 - Use the LibertyKite® as a means of support such as paragliding, parachuting or any other gliding activity.
- You are responsible for your own safety and that of others around you when using this product.
- If you are a minor, your parents or guardian must have read these warnings and instructions. Do not use this product without proper supervision.
- Do not use this product under the influence of alcohol, drugs or any other substance that could alter your physical condition.
- All seafarers (handling LibertyKite® or not) must wear a life jacket, shoes and gloves.

Important safety rules

- Do not use this product without first examining the equipment.
- Do not use this product without a release system (Line cutters or other means of releasing one of the lines). An uncontrolled LibertyKite® can be very dangerous for people downwind.
- Test the release system in less risky situations before using it in the water.

Weather conditions

- It is recommended to acquire a wind velocity indicator. Study the wind guide to understand the wind speeds.
- Never use this product in strong winds (over 25 knots).
- Never use this product in stormy weather.
- Never use this product in conditions where you cannot stand upright.
- Never use this product in conditions that are beyond your skill level (strong winds).
- Do not underestimate the strength of the wind.

- Beware of unstable conditions.
- Avoid strong, irregular winds.
- Beware of waves and swells.
- Be aware of air and water temperatures and protect yourself accordingly.
- Before setting out to sea, make sure you have sufficiently warm and waterproof clothing that does not hinder your mobility on the boat or in the water.

Choice of area of use

- Observe local regulations when using this product.
- Observe local navigation rules, speed limits, prohibited or bathing areas, and pebbles. Respect the rules of priority, prevention and collision.
- Do not fly the LibertyKite® near power cables, telephone poles, trees, airports, bushes, streets or cars.
- Use this product only if you have at least 100 m free of obstacles downwind and to the sides. The LibertyKite® can pull the boat downwind very violently.
- Do not fly the LibertyKite® near other people or animals. Do not use this product if there are any people downwind.
- Choose areas that are safe and away from other people.

Risks associated with lines

- Never touch the lines in front of the mooring cleats when the LibertyKite® is in traction. Lines under tension can cause serious injury.
- Always check that there are no knots in the lines before use. Knots can reduce the line resistance.
- Stay away from the lines unless LibertyKite® is secured on the boat deck. An unsecured LibertyKite® on the boat deck can take off by itself and cause serious injury.
- Tie up hair so it doesn't get caught in lines and other parts.
- As the straps have been pre-set by OCEA when LibertyKite® is sold, any change in the length, position of the straps, knots, etc. may cause LibertyKite® to malfunction. If any modification is made to the bridle, OCEA cannot, under any circumstances, be held responsible for any malfunction of the LibertyKite®.

Maintenance

- LibertyKite® are technical products, used in a marine environment. If you use your common sense and pay attention to your equipment, it will keep its qualities and factory settings for hundreds of hours.
- Never deploy your LibertyKite® on a rough surface that may contain sharp objects. This would lead to damage to the fabric.
- Be careful with the lines. If you hang them on a rock or a sharp object, check each one carefully. It is recommended to change them. Also make sure that there are no knots in the lines. Knots can weaken the lines by up to 50%.
- Avoid storing wet LibertyKite® in its bag - otherwise dry it as soon as possible.
- Do not leave LibertyKite® under glass in direct sunlight.
- Rinse the lines and LibertyKite® at the end of the season in fresh water.
- Put LibertyKite® in a dark and dry place with the bag open.
- Never use chemicals to clean LibertyKite®. Use only fresh water.
- Do not walk on the lines or the LibertyKit