2020

KITE

USER MANUAL

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VERSION: K01

Thank you for choosing North.

At North we are drawn to nature's ever-changing playground – where water meets wind.

Those two elements create an alchemy that is never the same, one day to the next. It stirs our restless souls, our hearts quicken. It promises us fire within. We chase it.

Every day we are inspired – and humbled - by nature's engineering genius and her beautiful, intuitive simplicity. To that we add cutting-edge technology from the World's best design workrooms and decades of performance expertise.

North is where nature meets technology, in the pursuit of a ride that will lift us out of this world and halfway to another.

This is kiteboarding.
We are North.

RELEASE OF LIABILITY

Releases of liability, claim waiver and assumption of risk:
By assembling and/or using this North Kiteboarding product, you agree that you have read and understood this entire North Kiteboarding product owner manual, including all instructions and warnings, prior to using North Kiteboarding products in any way.
In addition, you agree that you will ensure that any additional or subsequent users of your North Kiteboarding products will read and understand the entire product manual of the North Kiteboarding product, including all instructions and warnings contained in this manual, prior to allowing that person to use your North Kiteboarding product.

ASSUMPTION OF RISK:

In using your North Kiteboarding product and any of its components, you freely agree to assume and accept any known and unknown risks of injury to you and third parties when using this equipment.
The internal risks, dangers and hazards of the sport can be greatly reduced by adhering to the warning guidelines listed in this user's manual and by using common sense.

WARNING:

Use this product at your own risk. Kiteboarding is a HAZARDOUS activity which involves RISKS and DANGERS that are unavoidable and can result in serious bodily injury or death of the user and others. Ensure all parts of your product are thoroughly checked before each use. Download and read the User Manuals and Installation Guides relating to the product before using it. Failure to do so may result in personal injury or death.

RELEASE AND WAIVER OF CLAIMS:

In consideration of the sale of the North Kiteboarding product to you, you hereby agree to the fullest extent permitted by laws as follows;

To waive any and all claims, that you have or may have in the future against North Kiteboarding and all related parties resulting from the use of the North Kiteboarding product and any of its components.

North Kiteboarding and any of its agents are released from any and all liability for any loss, damage, injury or expense that any users of this product may suffer, or that your next in kin may suffer, as a result of the use of this product, including but not limited to negligence, breach of contract in the part of North Kiteboarding, or any of its agents, in the design and manufacture of this product.

SAFETY WARNINGS

For your safety and the safety of others, North Kiteboarding strongly urge you to undergo lessons with a recognised certified instructor prior to using this product. This user manual is NOT a substitution to lessons.

Kiteboarding involves unavoidable risks so it is important that you familiarise yourself with these risks and take appropriate measures to minimise risks as much as possible. You should also familiarise yourself with safety precautions and systems related to your equipment.

Kiteboarding is a high-intensity action sport. As such, you should not participate in this sport if you are physically unfit or suffer from any medical conditions that may put you at further risk when kiteboarding.

LIMIT DANGERS TO YOURSELF:

- Be aware of the usual risks associated with water sports such as drowning, rapidly changing conditions, hypothermia, sunburn, fatigue, rocks, waves etc.
- Do not kiteboard in extreme weather and/or rapidly changing conditions such as large storms, thunder etc.
- Check weather reports, local prevailing conditions, tides, and currents prior to launching.
- Do not kite in offshore winds, or strong onshore winds.
- Choose the appropriate kite for your body size, ability and the conditions. Do not use a kite size that is beyond your control for the given conditions. If conditions change while you are kiteboarding and you can no longer control your kite, return to shore.
- When the kite is inflated but not in use, secure the kite in one place with a non-abrasive, heavy object to prevent it from flying away in any sort of conditions.
- Check over all of your equipment prior to launching. Do not launch if lines are knotted, frayed, cut, tangled or damaged in any way.
- Only fly your kite on unobstructed waters. Do not fly your kite over land.
- Be aware of the surroundings prior to launching. Do not fly your kite around power lines, power poles, tall buildings, trees, cliffs, airports etc. Gusty conditions can make launches unpredictable so be cautious of potential collisions with obstacles.
- Always kite with a partner or a supervisor observing you from land.
- Whenever possible use a launch and landing assistant.
- Be familiar with your quick release system and do not be afraid to use it if necessary.
- Always use a safety leash so your kite is contained in case of a primary quick release deployment.
- Keep hands clear of lines when they are under tension from the kite. Lines can be very sharp and abrasive.

- Never wrap lines around fingers, arms, hands, legs, head etc.
- Helmets are strongly recommended to avoid injury from your board or other hard objects.
- We strongly recommend you wear a Personal Flotation Device (PFD) or impact vest while kiteboarding.
- Do not kitesurf, surf or foil in shallow waters or in areas with underwater obstacles.

LIMIT DANGERS TO OTHERS:

- Be courteous to other riders and comply with established give way rules.
- Stay clear of other water users. Leave sufficient space between you and swimmers, boats, paddle boarders and any other water user.
- Familiarise yourself with local marine use guidelines and obey all established rules.
- Respect wildlife and behave accordingly.
- When hydro-foiling you operate at greater speeds than normal and obstacles and other water users get closer exponentially faster. Be aware of this and adjust your actions accordingly.
- Note that this is a non-exhaustive list. Use common sense if other risks arise.

WARRANTY POLICY

+180 WARRANTY

We believe in our products, stand behind our quality and value our customers.

That's why we're giving you an extra 180 days beyond the legal warranty period for your country of purchase, just for registering your product online. Your product must be registered within 60 days of purchase at www.northkb.com, to receive a free extended warranty.

To register your North product simply:
1. Fill out the online registration form at www.northkb.com
2. Have your purchase receipt handy so you can upload it during product registration

FOR ANY WARRANTY CLAIMS PLEASE CONTACT YOUR NORTH KITEBOARDING RETAILER.

NORTH WARRANTY TERMS

This warranty covers new products purchased ONLY from an authorized North Kiteboarding centre, retailer or distributor or from the North Kiteboarding website.

North Kiteboarding warranties our products to be free from major defects in material or workmanship to the original purchaser ONLY, for a period of 365 days* from the date of purchase.
**Warranty period may vary by country of purchase.*

THIS WARRANTY IS SUBJECT TO THE FOLLOWING LIMITATIONS:

1. Warranty claims within the extended 180 days are valid only when the product is registered and activated in the warranty registration section of www.northkb.com within 60 days of purchase.
2. Warranty registration must be accompanied by the original purchase receipt in which the name of retailer and date of purchase must be clear and legible.
3. Warranty is only valid when the product is used for its normal intended recreational use and will not cover products used in teaching or rental operations, unless this is an official North qualified & affiliated school.
4. North Kiteboarding will make the final warranty determination, which may require inspection and/or photos of the equipment which clearly show defects. If necessary, this information must be sent to your point of purchase, or your country's North Kiteboarding distributor, postage prepaid.
5. If North Kiteboarding deems the product defective, the warranty only covers the repair or replacement of the defective product. North Kiteboarding will not be responsible for any costs, losses or damages incurred as a result of the loss of use of this product.
6. The warranty does not cover damage caused by misuse, abuse, neglect or normal wear or tear including, but not limited to: punctures, rigging with other than North Kiteboarding components, damage due to excessive sun exposure or hot temperatures such as inside an unventilated car, damage due to the product being stored in temperatures exceeding 45 degrees Celsius, damage caused by improper handling and storage, damage caused by use in waves or shore breaks, damage caused by self launching or self landing, damage caused by crashing the kite at high speed, damage caused by the use of kickers, sliders or other such equipment or riding on anything other than water, damage caused by using any inappropriate tools or any tool other than those specified within the installation guides and user manuals, damage caused by neglect of the care and maintenance instructions provided within the Installation Guides and User Manuals.
7. This warranty is void if any repair, change or modification has been made without authorization to any part of the equipment.
8. The warranty for any repaired or replaced equipment is good from the date of the original purchase only.
9. All warranty claims must be accompanied by a digital copy of the original purchase receipt in which the name of the official retailer and date of purchase must be clear and legible.
10. There are no warranties that extend beyond the warranty specified herein.

For any warranty claims please contact your North Kiteboarding retailer. A claim form can be downloaded from northkb.com.

Contact us at
North Kiteboarding
North Actionsports Group
Lageweg 34
2222 AG Katwijk, The Netherlands

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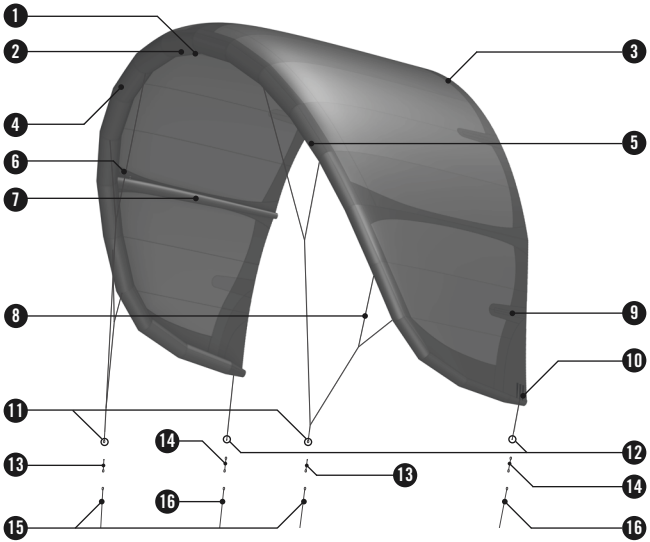


2.SET UP/ RIGGING THE KITE

2.1 INFLATION OF THE KITE

1. Lay your unrolled North Kite on a flat surface free from hard or sharp objects.
2. Turn the leading edge into the wind with the struts of your North Kite facing up.
3. Attach the pump leash to the pump leash attachment loop in the centre of the leading edge tube, allowing your hands to be free to pump the kite.
4. Ensure the Hyper-Flow Inflation System is securely installed into the leading edge.
5. Open the outer inflation cap by turning it counter-clockwise. Attach the pump hose bayonet directly to the Hyper-Flow Inflation System using a clockwise rotation.
6. Inflate your North Kite using a hand pump with a pressure gauge. Ensure all isolation clips on each of the struts are open to allow air to flow in from the leading edge. When inflating, hold the pump with both hands and provide even pressure to the handle.
7. Inflate your North Kite to the recommended PSI printed on the leading edge of the kite next to the Hyper-Flow inflation valve.
8. It is common that the leading edge will inflate before the struts. If the struts are not inflating, make sure the isolation clips are open and the air tube is not pinched or damaged.
9. When your North Kite is fully inflated, remove pump hose and securely screw the outer inflation cap back in place. Cover the Hyper-Flow Inflation System with the provided neoprene cover.
10. After the kite is inflated, it is recommended that you isolate the air in your struts by closing the isolation clips on the air distribution tubes.
11. Once the kite is properly inflated, turn the kite over with the leading edge facing into the wind and secure your kite by placing a soft and heavy object on top of the leading edge eg, sand, board or harness.

WARNING:

We recommend using a hand pump with a pressure gauge to inflate your kite. Use of air compressors are not recommended. Overinflation will damage the kite and void any warranty.

2.3 ATTACHING CONTROL LINES TO THE KITE

1. With the kite positioned securely with the leading edge facing upwind on the ground, unwind lines from the Control System walking downwind.
2. Place Control System on the sand with the red end of the bar on the right-hand side. Begin to untangle the steering lines starting at the bar, while walking upwind back towards the kite, keeping the lines parallel to each other. The lines should not be twisted or cross over each other.
3. Once lines are clear and tangle free, attach the four lines from the Control System to the corresponding kite pigtails using a larks head connection. Use the colour code system to connect the correct Control System line connectors to the kite pigtails. Double check the connections are tight and secure

WARNING:

Before launching, always double check your lines are free of tangle and attached correctly. Wrongly attached lines will result in a dangerous situation with the kite flying incorrectly, with very little control.

2.4 PACKING UP THE KITE

1. First open up all strut bladder isolation clips by pushing the end tab outwards.
2. Deflate the air from the kite by opening the Hyper-Flow Inflation System by unscrewing the bottom cap anticlockwise.
3. Roll the kite up from each wingtip to the centre. Fold kite in thirds and store in your North Kite bag.

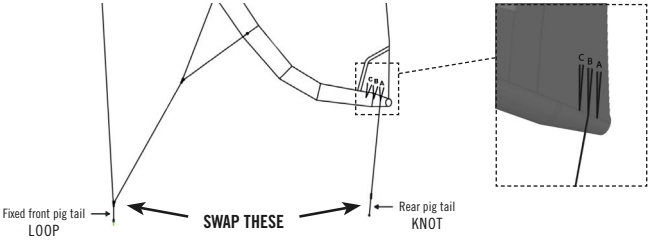
3. HOW TO...

3.1. STEERING IMPULSE WING TIP TUNING OPTIONS

You can adjust your bar pressure and steering impulse to your personal preference using the rear line wing tip tuning attachment options. Attaching the rear attachment line to the front attachment point **(C)** allows for maximum bar pressure and moderate steering impulse. Attaching the rear attachment line to the rear attachment point **(A)** allows for light bar pressure and maximum steering impulse. Attachment to the middle attachment point **(B)** allows for light bar pressure and standard steering impulse. Use a loop to loop connection to secure the rear attachment line to the attachment point on the kite.

3.2. WHEN USING A PRE-2020 NORTH CONTROL SYSTEM WITH YOUR 2020 NORTH KITE.

We recommend using a new 2020 North Navigator Control System with your 2020 North Kite but if you wish to use a pre 2020 North Control System you can do so by switching the kite pig tail positions. Our kite pig tails have been designed to be exactly the same length so you can easily change the front (larks head loop) and rear (knotted end) pigtail positions to match other manufacturers bar configurations by disassembling the loop to loop connection to separate the kite pig tails from the kite bridle. Ensure the chosen control system features a 'low V' for maximum kite performance.



WARNING:

Be sure to familiarise yourself with the Safety Procedures relevant to your pre-2020 North Control System.

WARNING:

Use of a non North Control System on any North kite is at the users own risk. North Kiteboarding does not accept responsibility.

3.3. WHEN USING A 2020 NORTH NAVIGATOR CONTROL SYSTEM WITH YOUR 2020 NORTH KITE.

See the Navigator Control System Manual for safety procedures, trimming instructions and features.

WARNING:

Ensure you familiarise yourself with all safety procedures outlined in the Navigator Control System Manual before using your kite.

4. REPAIRS

4.1. TEARS

For major tears in the kite fabric, we recommend you consult your North dealer or a qualified kite repair centre.

For minor tears in the kite fabric, you may repair the tear with kite repair tape supplied in the spare parts pack in your North Kite bag using the following instructions:

1. Clean and dry the kite with fresh water in the area of repair.
2. Lay the kite on a surface that is flat, clean, dry and smooth.
3. Cut two pieces of repair tape the same size, ensuring they are big enough to cover the entire tear.
4. Fully cover one side of the tear with a piece of the repair tape, rubbing gently to smooth out the surface.
5. Cover the opposite side of the tear with the second remaining piece of repair tape in the same way previously mentioned.
6. Make sure the tape is secure, especially at the edges.

3.2. BLADDER REPAIRS

Before attempting to repair one of your kite bladders ensure:

- Kite is clean and dry.
- Bladders are deflated.
- Carry out the repair in a clean, dry location out of the wind: avoid repairing your kite on the beach or in dirty, dusty areas.
- Have your control system handy and a bladder repair kit (supplied with kite) before you begin to repair the bladder.
- Keep track of all valve parts for later use.

3.2.1. REPAIRING LEADING EDGE BLADDER

1. Lay your fully deflated, dry and clean North Kite flat on the ground with struts facing up.
2. Disconnect silicone inflation tubes from the leading edge and strut valves by opening the plastic hose clamps. Set these aside for use in point number 7.
3. Open the velcro at each end of the leading edge and pull the bladder out a few centimetres on each end.
4. Attach a kite control line to each of the two ends of the bladder using a larks head connection. This will allow you to easily re-insert the bladder once it is repaired.
5. Separate the Hyper-Flow valve assembly from the leading edge bladder. Do this by carefully lifting the retaining lanyard from the valve base. Next, push the Hyper-Flow valve into the leading edge with your fingers separating it from the internal velcro. Keep track of the assembly for later use.
6. Open the zipper in the middle of the leading edge and gently pull the bladder out through the opening.
7. Reinstall the silicone inflation tubes to the leading edge valve locations. Close the isolation clips. Install your Hyper-Flow valve to allow for inflation. Inflate the leading edge until it takes shape and becomes firm to touch. Do not overinflate; the pressure required is much lower than normal kite inflation pressure.
8. Locate the leak by submerging the bladder in water and watching for bubbles. Alternatively, use soapy water and a rag or sponge and bathe the bladder, watching for bubbles. Once the hole is located mark the hole with a permanent marker. Dry and deflate the bladder fully.
9. Carefully place a patch on your bladder covering the hole using the patch provided from your North Kiteboarding Spare Parts Kit inside your North Kite bag.
10. Remove the inflation tubes.
11. Using the lines attached to each end of the bladder, gently re-feed the bladder back inside the leading edge one end at a time. Avoid twisting the bladder as you feed it through.
12. Feeling with your hands, find the location of the inflation valves. Once located, pull them back through the holes in the leading edge.
13. Pull the bladder out of the ends just enough to remove the control lines. Gently push the bladder back inside so the end of the bladder is flush with the end of the tuck flaps.
14. Carefully fold over and reinstall the tuck flaps. Ensure the inner velcro is properly aligned.
15. Pull the Hyper-Flow valve assembly through the hole in the leading edge, ensuring that is correctly aligned and not rotated. Re-install the lanyard to the Hyper-Flow valve base.
16. Re-install all silicone isolation tubes and tube clamps.

17. Partially inflate the leading edge. Check carefully there are no twists or uneven areas in the bladder before applying full inflation pressure.
18. Inflate the kite and confirm repair has been effective.

3.2.2 REPAIRING STRUT BLADDER

1. Lay the fully deflated, dry and clean kite flat on the ground with struts facing up.
2. Disconnect silicone inflation tubes from the leading edge and strut valves by opening the plastic hose clamps. Set these aside for use later in the repair.
3. At the nose of the strut, locate the installation line and untie it from the leading edge.
4. Attach a control line to the bladder installation line on the affected strut.
5. Gently push the inflation valve into the strut body.
6. Open the velcro at the end of the leaking strut, allowing you to access the internal bladder.
7. Gently pull the bladder out through the strut end making sure the line passes smoothly through the opening at the nose of the strut body.
8. Leave the control line attached to the installation line.
9. Reinstall the inflation tube onto the strut inflation valve.
10. Gently inflate the bladder and close the pinch clip. Locate the leak by bathing the bladder with a rag or sponge using soapy water and watch for bubbles.
11. Once located, dry and deflate the bladder fully, marking the hole with a permanent marker.
12. Place a patch on the hole using the bladder repair material from your North Kiteboarding Repair Kit.
13. Gently re-feed the bladder back inside the sleeve until the installation line is fully exposed. Avoid twisting the bladder as you reinstall.
14. Remove the control line and reattach the installation line to the leading edge.
15. Carefully fold over and reinstall the tuck flaps. Ensure the inner velcro is properly aligned.
16. Once the bladder is reinstalled, pull the inflation valve back into the hole of the sleeve.
17. Reinstall the installation tube and hose clamps to both the strut and the leading edge.
18. Partially inflate the strut to make sure there are no twists and the bladder is taking the shape of the strut.
19. Inflate the kite and confirm repair has been effective.

5. KITE CARE & MAINTENANCE

- Allow the canopy of the kite to dry fully prior to packing it into its bag. Never store your kite wet or moist in the kite bag for an extended period of time. This can cause colour migration, which will render the warranty void.
- Do not use any harsh chemicals for cleaning, as this will damage the kite.
- Avoid contact with sharp objects such as rocks, shells, wood etc, that may tear, damage or puncture the kite.
- Avoid unnecessary UV exposure by storing your kite away from direct sunlight.
- Avoid prolonged wind and sun exposure when the kite is not in use. Flapping of the kite and excessive UV exposure will shorten the lifespan of the kite.
- Use of air compressors is not recommended. Overinflation will damage the kite and void any warranty. Be sure to follow the inflation pressure printed on the kite.
- Store kite in its North Kite bag when not in use.
- Regularly inspect your kite canopy for scratches or damage and repair small tears as needed. Small tears can easily become large tears so better to act early.
- Never use rocks/stones to secure your kite.

6. TRAINER KITE

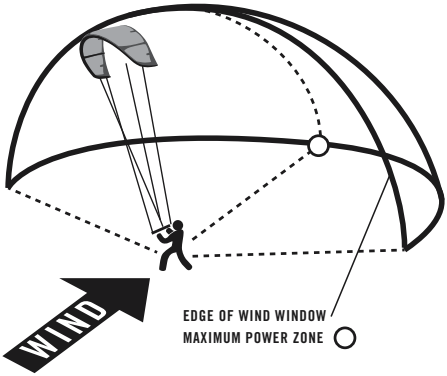
6.1. KITE POSITIONS: THE POWER ZONES

It is important that you understand the power zones before you launch your kite. Having your kite in certain positions in relation to the wind direction will give you more or less power.

Kiters will refer to the “Wind Window” which is a three-dimensional area downwind of the rider. This is the fundamental theory behind kite control. The radius of the wind window will depend on the length of the lines as the kite moves along the circumference of the window.

The numbers on an analogue clock face are used to represent the kite position within the wind window with 12 being the top of the window, 3 being the lower right-hand side of the window and 9 being the lower left-hand side of with window etc. Having the kite directly above you at 12 is the position where the kite will have the least power.

When the kite is moving along the upper edge of the wind window it will have the least power. This upper edge of the wind window is sometimes referred to as the neutral zone. As the kite moves into the middle downwind area of the window it will have the most power. This downwind area is sometimes referred to as the power zone.



6.2. SETTING UP YOUR KITE

1. Remove the kite and control system from the North Trainer Kite bag.
2. Unroll your kite with the trailing edge of the kite towards the direction of the wind.
3. Put sand on the trailing edge to hold the kite in place.
4. Remove the bridle pigtails from the velcro bridle manager
5. Ensure the bridle lines are free of tangles and place the red on the right and the black on the left.

6.3. CONNECTING LINES

1. Unwrap the lines while walking away from the kite in an upwind direction.
2. When the lines are completely unwrapped, place the Control System on the sand with the red end on the right-hand side.
3. Walk your lines towards the kite keeping the left and right lines separated.
4. When you are sure there are no tangles in the lines, connect the flying lines with the corresponding coloured pigtails with a larks head connection.

6.4. LAUNCHING THE KITE

WARNING:

Ensure the kite size is appropriate for the wind conditions. A trainer kite can produce a large pull in strong winds. We highly recommend having an instructor or an experienced kitesurfer with you.

1. Attach the wrist leash to your arm to allow for safety if you are forced to let go of the Control System. A loose kite can be a danger to other individuals.
2. Ensure the area around you is clear and completely unobstructed, especially the area downwind of you.
3. With your back towards the wind and your body facing the kite, walk backwards until the slack is removed from the lines,
4. Lightly pull the bar towards you to put power in the kite and lift the kite off the sand.

6.5 CONTROLLING THE KITE

Neutral Position:

- To keep the kite in a neutral position with the minimum power, with both hands on the bar position the kite at the top of the wind window at 12. The control bar should be straight, with each control line parallel to one another.

Left Turn:

- To turn the kite left, extend your right arm and bend your left arm.
- Always keep one arm extended. Do not pull both arms towards you at the same time.
- The quicker your movements are the faster the kite will turn and the more power it will create. Slow movements are recommended until you are more comfortable and experienced.
- Once your kite starts the turn, it will continue to turn unless you correct it otherwise.

Right Turn

- Extend your left arm and bend your right arm.
- Always keep one arm extended. Do not pull both arms towards you at the same time.
- The quicker your movements are the faster the kite will turn and the more power it will create. So slow movements are recommended until you are more comfortable and experienced.
- Once your kite starts the turn, it will continue to turn unless you correct it otherwise.

KEY POINTS TO REMEMBER

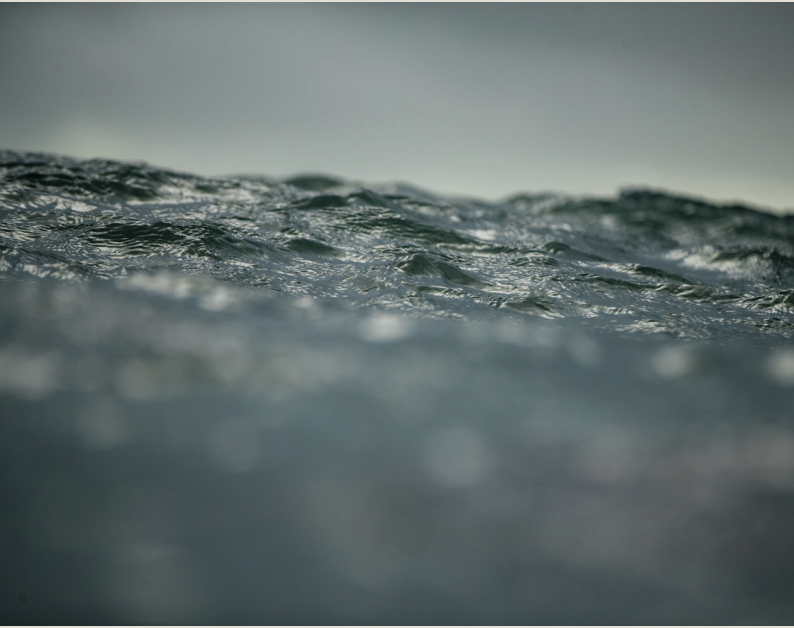
- Always keep your eyes on the kite.
- Steer slowly, making small movements with the control bar. The quicker the movements, the faster the kite will turn and the more power it will create.
- Turn the control bar like the handlebars of a bicycle. Steering the control bar like the steering wheel of a car is ineffective for steering the kite and can cause the kite to become out of control.
- Twisting and crossing of lines are normal when flying curves or looping. You can still steer and control the kite when this occurs, so don't panic. However, it is recommended that you avoid a large number of twists, in order to prevent steering becoming more difficult and to decrease wear on the lines.
- Attempt to make a figure 8/ infinity path with the kite across the wind window.

6.6 KITE CARE

- Do not use any harsh chemicals for cleaning, as they will damage the kite.
- Avoid contact with sharp objects such as rocks, shells, wood etc, that may tear, damage or puncture the kite.
- Avoid unnecessary UV and wind exposure, by storing your kite away from direct sunlight and direct wind.
- Allow the canopy of the kite to dry fully prior to packing it into its bag. Never store your kite wet or moist in a bag for an extended period of time as this can cause colour migration, which will render the warranty void.
- Store kite in its protective bag when not in use.
- Check your kites connection points and canopy periodically for damage and make sure to repair small tears as needed. Small tears can easily become large tears with one bad crash so better to act early.

7. SERIAL NUMBER

Located on the inner wingtip of kite.



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