



**FLYSURFER**

**USER  
MANUAL  
VIRON<sup>3</sup>**

EN



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# 01 SAFETY NOTES

**Read the entire Gear Guide online** thoroughly before using the kite, and strictly confirm to the procedures noted. **The following safety guidelines are only guidelines and do not claim to cover every instance.**

01. Kitesurfing is a **potentially dangerous sport**, that holds **risks for the athlete or the people surrounding them**. Incorrect use of this product may result in **serious injury or even death** for the user or third parties. Every user should be qualified by a FLYSURFER kiteschool or a FLYSURFER dealer.
02. The user carries the **sole responsibility** for themselves and third parties when using this product. The user must check their equipment for wear, especially wearing parts, before each kite session. Do a test activation of your quick release before every launch. This will ensure the system is working and reinforces the release instinct of the kiter.
03. The product may **only be used with original spare parts**, and may not be modified.
04. This product has been designed for riders weighing 40-120kg. We cannot guarantee the proper functioning of the product outside of this weight range.
05. Never kite in unsuitable conditions such as storm fronts, lightning, or offshore winds. Check the weather and wind conditions carefully and choose the according kite size.
06. Check out the kiting spot beforehand. Make sure you are aware of any risks such as obstacles, shallows, currents and bans. Also be aware if a rescue craft can get to you in case of an emergency. It is always best to ask people (locals) who know the area well.
07. Keep a safety margin of at least two line-lengths downwind of you, and never kite near people or obstacles. Kiting near powerlines, roads, airports, cliffs, etc. is extremely dangerous.
08. Make sure that someone is looking out for you and that help is there if you need it. Never go out alone. Never kite further away from shore than you can swim back.
09. The incorrect usage of lines creates a high risk of injury for yourself as well as others. Body parts that get caught in the lines of the kite may suffer from severe injury or burns.
10. Only use bars with a safety system that you can open in emergency situations. Use a quick-release kite leash so that you can disconnect your body from the product in case of an unforeseeable emergency.

## 01.01 Do not fly with kites

A kite is not designed, tested or licensed as an aircraft or flying device. The use of a kite as a flying device is illegal and not covered by insurance. **Flying** with this product **can lead to death!**

## 01.02 Position of the stopper ring

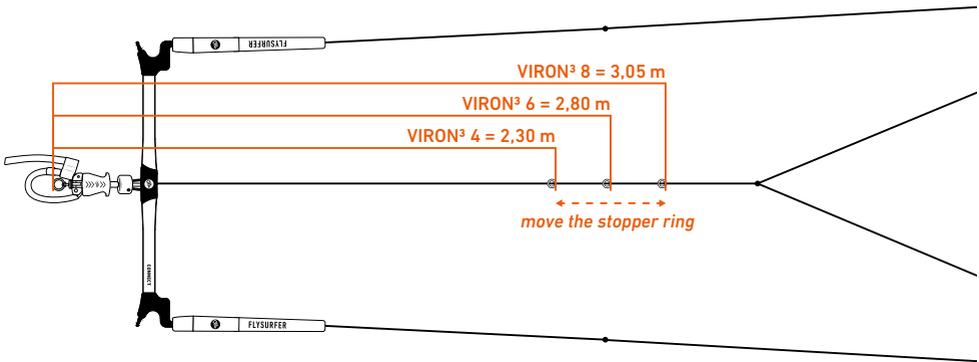
The position of the stopper ring on the safety endline of the CONNECT bar must be checked and, if necessary, adjusted when changing to another kite or kite size. The correct stopper ring position can be found in the line plan of the corresponding kite.

The CONNECT bar in the „Ready to Fly“ package of the VIRON3 is currently delivered with the following stopper ring positions (measured from the lower end of the safety endline):

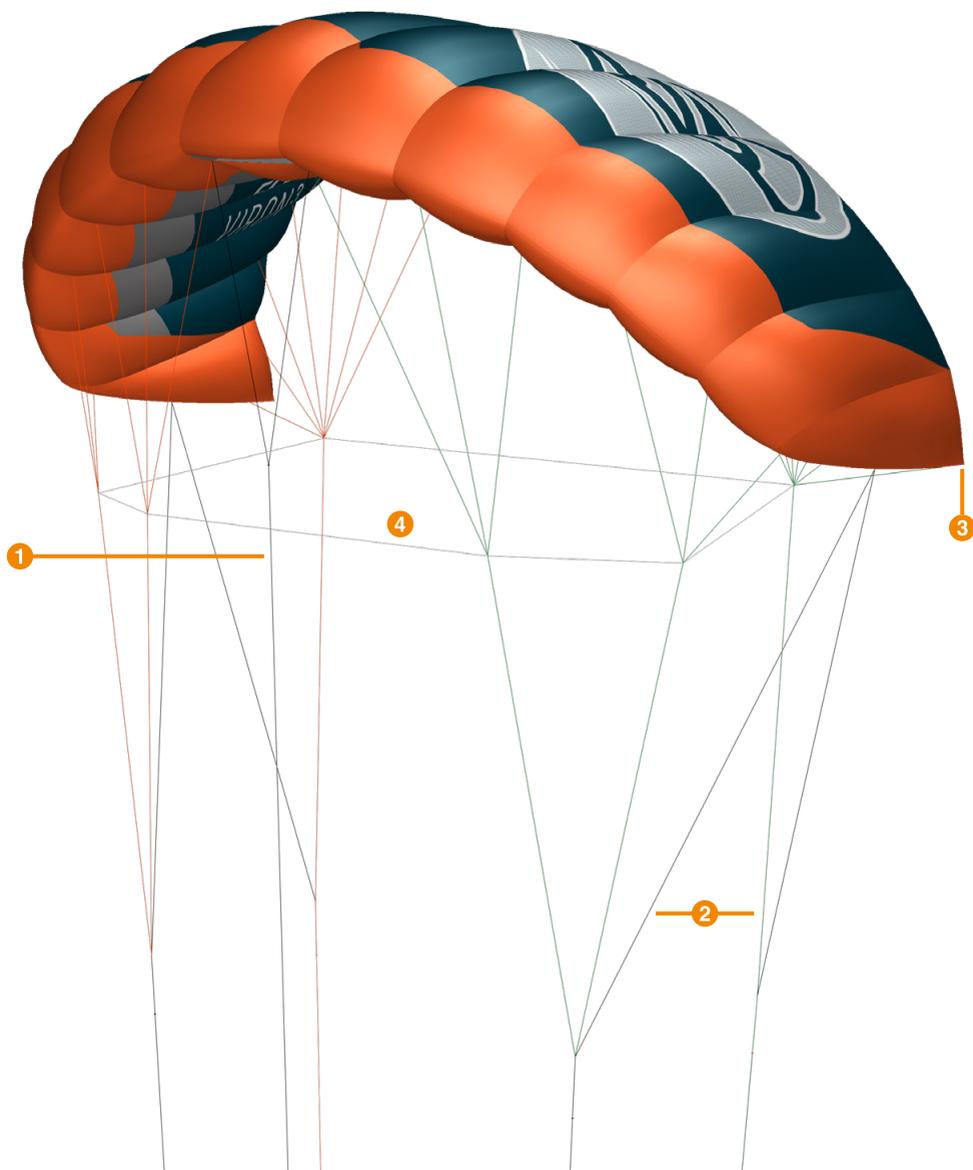
**VIRON<sup>3</sup> 4 = 2,30 m**

**VIRON<sup>3</sup> 6 = 2,80 m**

**VIRON<sup>3</sup> 8 = with the standard position 3,05 m**



## 02 OVERVIEW OF THE KITE



### 1 B-SAFE SYSTEM

The B-Safe System is guided through sliding rings outwards along the A-Level. After activating the quick release, the bar slides up the 5th line and the kite is reefed horizontally in the middle. This removes the pressure in the kite and allows it to come down powerless through the wind window. The VIRON3 can be reactivated upon demand and is immediately ready to re-launch.

### 2 SIMPLE BRIDLE CONCEPT (A+Z)

The Simple Bridle Concept has an A-level bridle, as well as brake level bridle (Z) and comes without a mixer (pulley system). The direct connection of the flying lines, achieves light bar forces for easy handling. The kite uses pulleys on each wingtip to improve feedback when steering. The excellent depower is significantly supported by the flattening of the leading edge which reduces lift. This combination of features never lets the VIRON3 accelerate abruptly, which greatly increases control in stronger winds and makes the kite more predictable.

### 3 AUTOMATIC DRAINAGE SYSTEM

The VIRON3 has a large air intake that reaches up to the trailing edge and largely prevents possible ingress of water. The drainage system is integrated into the whole trailing edge of the kite and ends in the form of hand-wide openings at both wing tips. This allows water and sand to drain automatically from the kite, without affecting the kite's flying behaviour.

### 4 ANTI-INVERT ROPE

The Anti-Invert Rope is another safety feature that prevents the kite from inverting when the B-Safe system is activated. This ensures a safe and easy relaunch.

### + AUTO-RELAUNCH

The VIRON3 is the only closed-cell foil kite to have such an effective auto-relaunch. The kite's outline and thick profile mean the VIRON3 can be relaunched with very little effort simply by turning the bar. Ideal for children!

### + IMPACT ABSORBING TECHNOLOGY

Durability and quality are essential for training use. The VIRON has a special material mix that features double stitched seams, reinforced ribs and straps at load points. Elastic, air-permeable mesh panels are integrated in the chambers to absorb the impact energy. The top and bottom sail is made out of our proven 32g DLX+ fabric (Double Rip Stop).

### + SELF INFLATABLE

FLYSURFER significantly improved the inflation of the VIRON3 by including a sharknose in the leading edge and integrate rigid foils around the air intake valve. These allow the kite to form its wing profile faster and maintains optimal dynamic pressure during turning. The start and (water)restart is faster and kite control further increased.

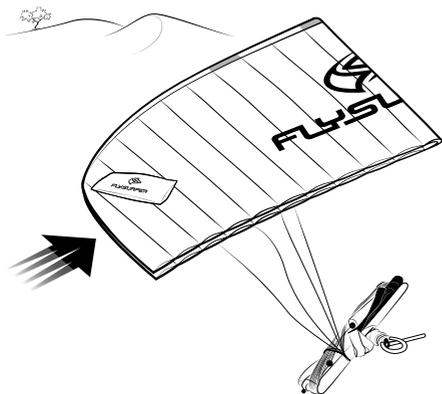
## 03 HANDLING



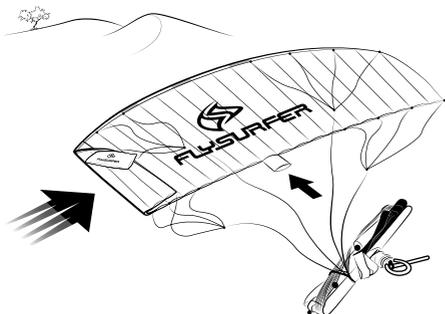
*A kite needs to be secured properly even if the wind is light. A runaway kite can be a serious danger to people or animals downwind. To ensure a long lifespan of your kite, we recommend that you do not leave the kite flapping in the wind and sun for long periods.*

### 03.01 Setting Up a Foilkite

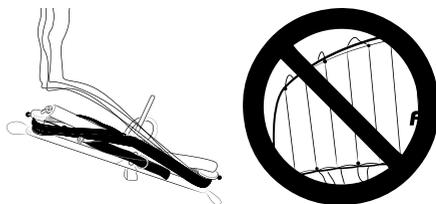
**1** Lay the kite out on a surface free of hard or sharp objects. Unroll your kite upside down into the wind and secure it with something that has no sharp edges and is heavy enough to hold down the kite for the given wind. Place the bar far enough away from all bridle lines on the trailing edge side of the kite. Make sure that the bar cannot fall or be pulled into the bridles.



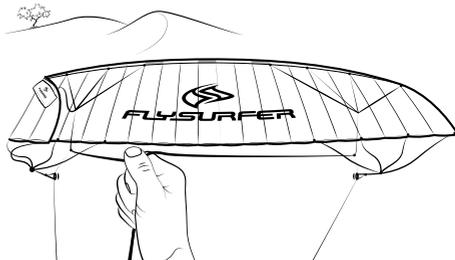
**2** Open the kite and if necessary, close the deflate valves. Unroll the lines from your bar whilst walking away from the kite.



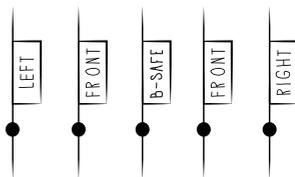
**3** Check your bridle for tangles. Make sure that none of the lines are caught around the back of the kite.



**4** Start at the leading edge holding up the front lines to visually check the bridle step by step.



**5** When the bridle is sorted out, lay the front lines to the inside and the steering lines to the outside, the thin B-Safe line lies in the middle. If not, follow the tips on the "Sorting out the bridle" chapter.

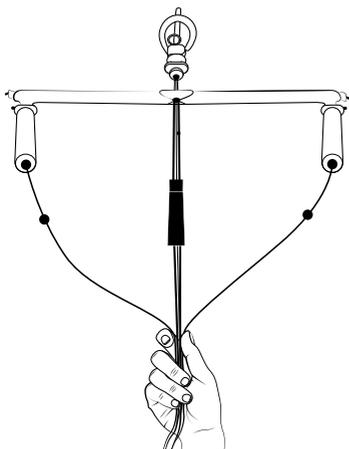


**6** Ensure your flying lines are connected correctly and clear of any potential hazards. Check for any damage or knots.



*Exception: There is a moveable "stopper" ring in the B-Safe End-line, that prevents the bar from sliding up too far when released.*

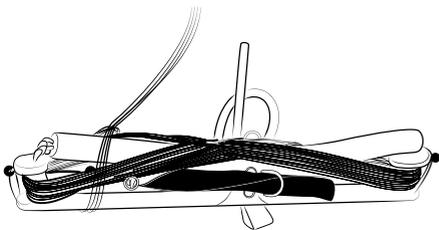
**7** If the lines are still twisted, untwist them by turning the bar. It may be possible (especially after not being careful when packing away or setting up the kite) that the bar has to be pushed through the lines again to untwist.



### 03.02 Sorting the bridle

Even a badly tangled bridle can be quickly sorted out with the right technique. If the bridle is tangled, it was probably caused by mistakes made when packing or setting up the kite.

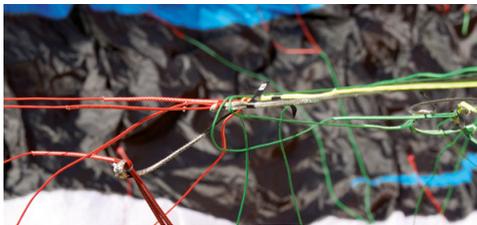
**1** Roll up your lines onto the bar until you get close to the mixer and secure the lines with a half hitch and/or the bungee cord.



**2** Undo any loops, knots or bunches that may have formed.



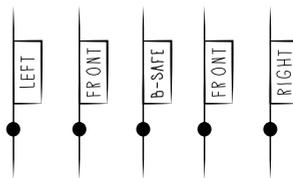
**3** If the bridle is tangled, lines from one side of the bridle may be running through the lines on the other side.



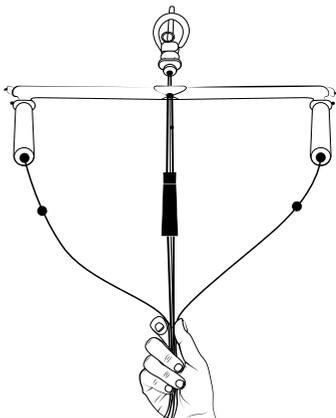
**4** Stick the bar along these lines through the bridle.



**5** Lightly tension up the bridle again to check it. If necessary, repeat the last step till the left and right bridles are separated.

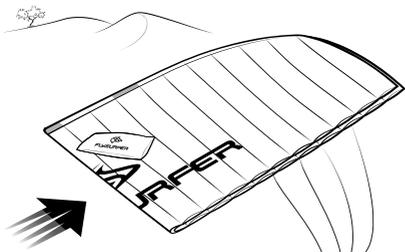


**6** Unroll the lines from the bar and check as before.



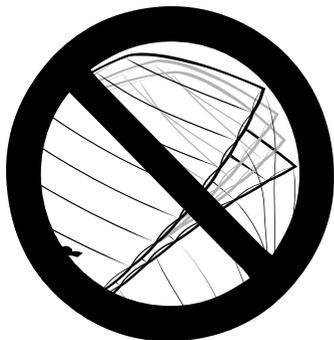
### 03.03 Securing a Foilkite

❶ Fold your kite in the middle and let the tips flow out downwind. The bottom sail and the bridle will be facing inwards. Weigh down the kite in the front third of the top sail. This method prevents the tips from flapping in the wind. Opening the deflate valve(s) can also help.

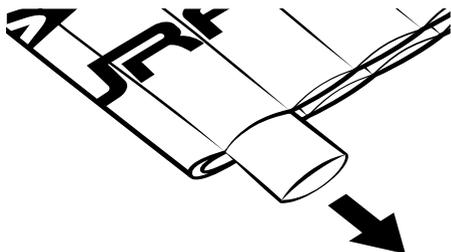


*Tip: The kite can also be secured using the same method as the launch. However, it has been proven that the above method keeps the kite more still in higher winds.*

❷ Make sure that the tips are not flapping too much. This can lead to the bridle tangling. The tips can be additionally secured with a bit of sand or other suitable object.



❸ Open the deflate valves. A deflated kite will flap around on the ground less.

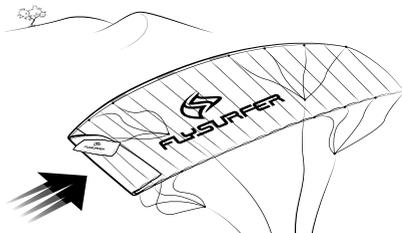


## 04 LAUNCHING

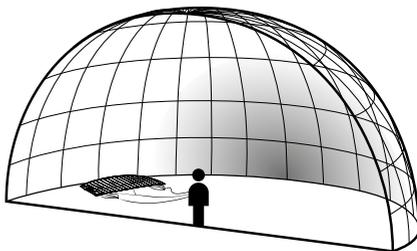
Please check not only the wind and weather conditions, but also all your equipment, especially the safety system before launching. Do not use any kite outside of its recommended upper wind range. When launching in strong winds, we recommend that you have an assistant holding you from the back of your harness. During launching, always pay attention that your bridle lines do not get caught on anything or become tangled.

### 04.01 Self launching a Foilkite at the edge of the wind window

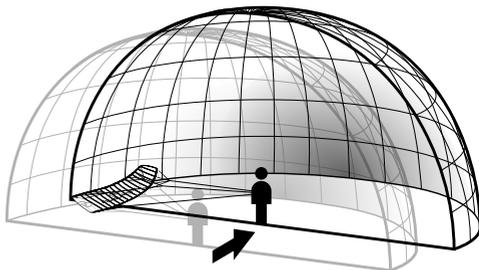
❶ Lay the kite out 90° to the wind. Fold over the windward wingtip and secure it near the leading edge.



❷ Pre-inflate the kite at least half way, for more control during the launch. The kite should be positioned 15-30° downwind of you when you slowly tension the lines for launch.



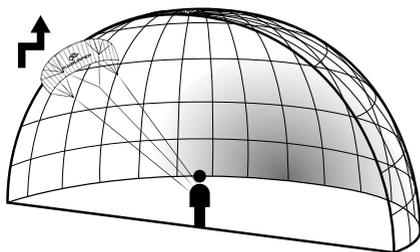
❸ Walk downwind a bit as the kite inflates.



- 4 Pay attention that the downwind wingtip does not fold over upwind.



- 5 Release the kite from the sand or object securing it with a step backwards away from the kite and carefully steer it.

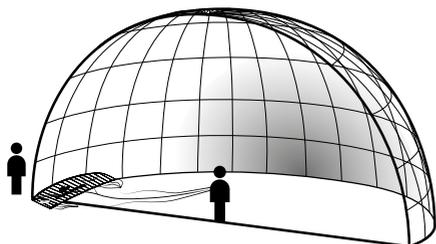


*Tip: You can prevent the lines getting caught around the bottom wingtip by folding over the tip once more and securing the second fold with e.g. sand.*

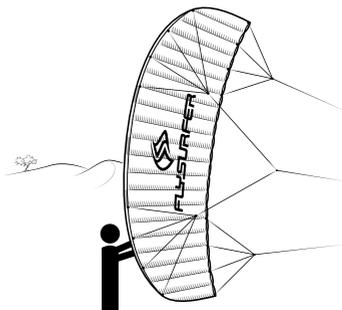
## 04.02 Edge of the wind window with a helper

It is important that your helper is experienced with this technique and you have explained them how it's done.

- 1 Position kite and helper exactly on the edge of the window.

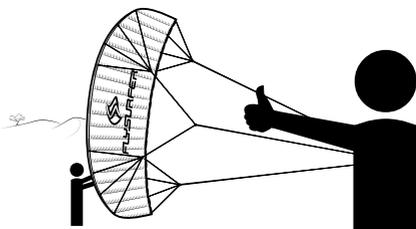


- 2 The helper begins from the center of the kite and holds multiple air intakes into the wind. As the kite fills, the helper slowly works his hands down the leading edge of the kite letting the inflated parts of the kite rise up. The bottom tip should not be touching the ground anymore.



*Tip: Pre-fill the kite properly!*

- 3 As soon as the kite is inflated and you are ready, give the helper the thumbs up signal that he can let go. Make sure to once again check whether all lines run freely before doing this.



- 4 If the kite is threatening to collapse over the assistant, you can either walk downwind, or the assistant upwind.

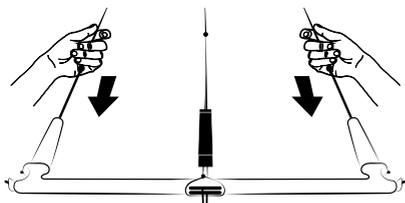


*Note: Get aligned with the wind, the helper retains his position and is not moving around.*

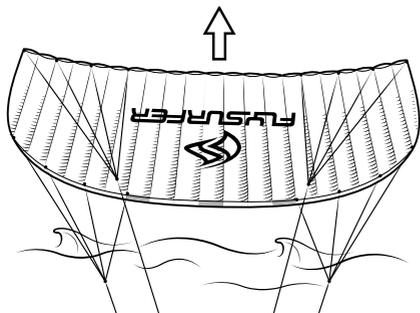
## 05 RELAUNCH

### 05.01 Reverse Launch

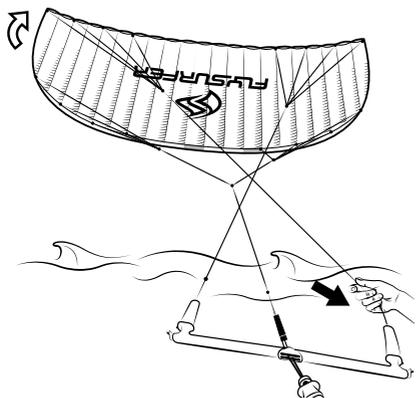
1 Grab the leader lines above the floaters as high up as you can. Make sure that the bar is the right way up. Do not cross over your hands.



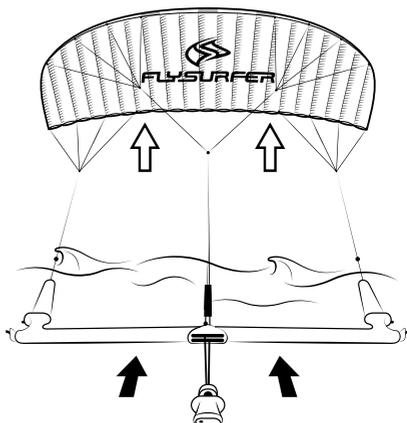
2 Pull in both leader-lines as far towards yourself as possible to reverse the kite off the water. Strong pulls or pumping the lines may help in light winds. If the kite does not release from the water, grab the leader lines higher up.



3 When the kite is at least one wingspan above the water, let go of one of the leader lines. Make sure you keep hold of the other one and the bar is in the right position.



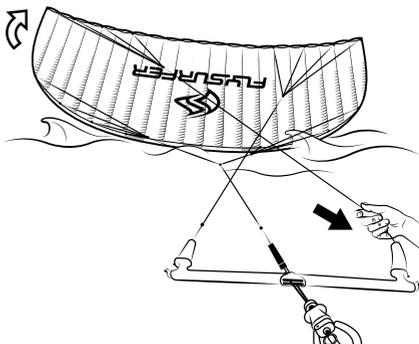
4 The kite will now spin around. As soon as the leading edge of the kite points up let go of the remaining leader line and put your hand back on the bar. Depower the kite till its back in the sky towards the zenith.



*Tip: The reverse launch is the recommended relaunch method when kiting on solid terrain. This minimises potential damage from abrasion.*

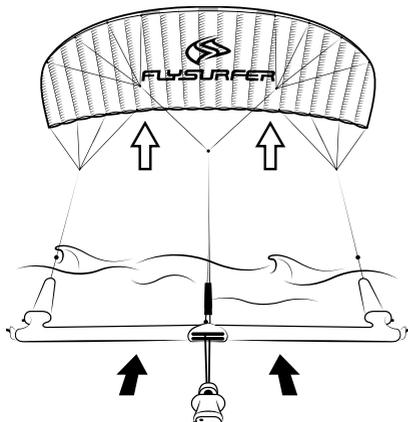
### 05.02 One Line Relaunch

1 Grab one steering line high above the floater. Pull back the line far enough towards you so that the kite starts to peel to the side you are pulling. Keep pulling until the kite launches at the edge of the wind window.



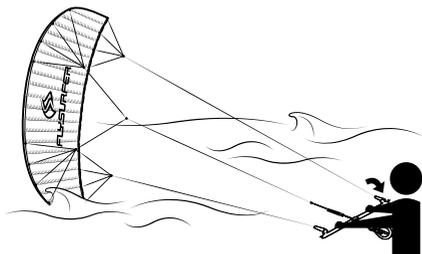
*If the kite does not lift up and peel to one side when pulling the leader line, try pulling the opposite leader instead. If this still does not work, then use the reverse launch method.*

2 Let go of the steering line as soon as the leading edge of the kite points up. Grab the bar and keep it depowered until the kite is flying again.

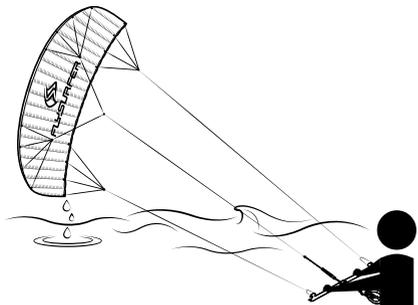


### 05.03 Drainage

1 The drainage system ensures that water or dirt are automatically removed from the kite. The kite has to be turned upright onto its side. Try to achieve this by pulling on one steering line. Try to prevent the upper wingtip from collapsing.



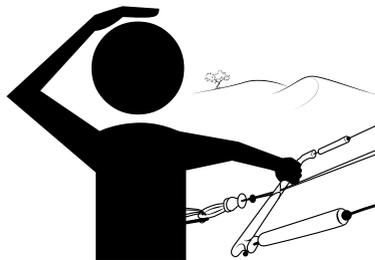
2 The excessive water / dirt should now flow out of the tip until it is ready to be launched again.



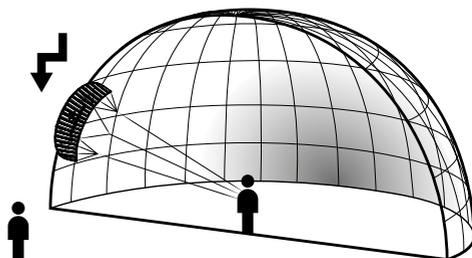
## 06 LANDING

### 06.01 Landing with an assistant

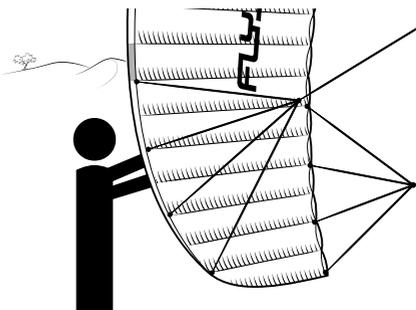
1 The easiest and safest way to land your kite is with the help of an assistant. Signal a helper who knows how to land your kite, that you want to land. The helper should be standing well upwind of the kite.



2 Lower the kite towards the helper along the edge of the wind window.

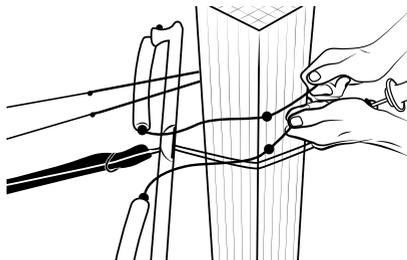
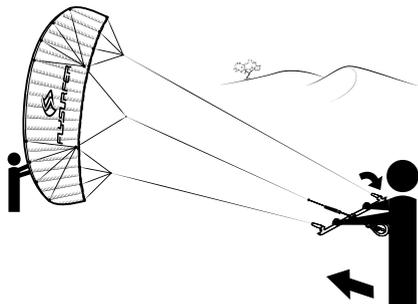


3 The helper can now approach the kite and grab hold of the leading edge of the kite.



!!! **Warning:** The helper should never grab any lines.

- ④ As soon as the helper has the kite securely in their hands, walk towards them until all flying lines are no longer under tension. This way the kite will flag out downwind of the helper.
- ③ Secure the leader lines around a suitable object in a way that the backlines stay "braked" and flying up of the kite again is not possible.



- ⑤ Secure the kite as described in "Securing the Kite".

- ④ Secure the kite as described in "Securing the Kite".

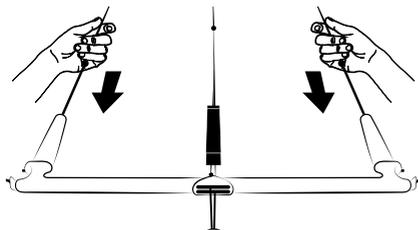
*Tip:* When using this method it is also possible to walk your way up one of the steering lines to the kite, as long as the wind is light enough.

## 06.02 Self-landing by backstall

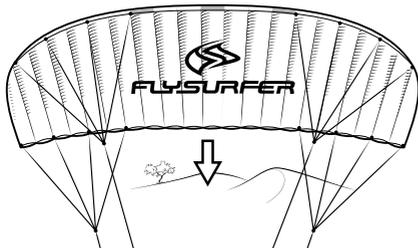


**Warning:** Keep at least two line-lengths safety distance downwind. We generally recommend landing with the help of an assistant. Landing the kite by backstall should only be attempted in light winds.

- ① Grab both leader lines above the floaters.

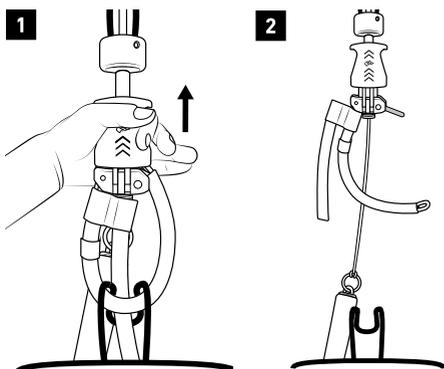


- ② Pull them back towards you until the kite stalls and flies backwards towards the ground. To a certain degree you can still control the kite as it flies backwards. Never let go of the leader lines when attempting this self-landing procedure.



## 07 SAFETY SYSTEM

**1** The VIRON kites are equipped with a B-Safe Safety. After activating the quick release, the control bar slides up to the stopper ring.



**2** The kite will flag out on this safety line and will come to rest on the water in its normal windrange.



### 07.01 Reactivating the kite

After leashing out, the kite can easily be reset on the water and relaunched again.

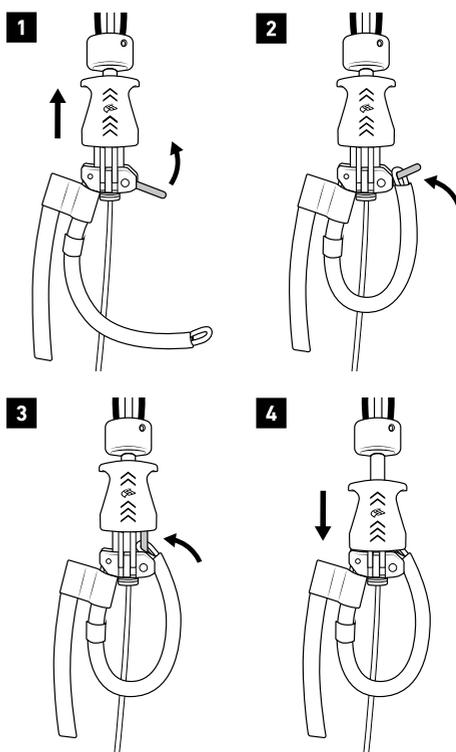
**1** Work your way up the Safety-Endline until you get to the control bar. Be careful not to get tangled in the loose endline.



**2** When you reach the bar, secure the endline to your harness hook. This is done by wrapping the side of the endline which is under tension two times around the harness hook and then the loose side one time in the opposite direction.



**3** Now the quick release can be reset with both hands.



**4** Let the chicken loop go and unwrap the endline. Make sure you have a good grip on the endline as you hook in the chicken loop and secure it with the chicken dick.

**5** Slowly release the endline bit by bit. Make sure that it has not wrapped itself around any part of your body. Do not let the endline slip too quickly through your fingers as to avoid getting burns or cuts. Because of this, it is recommended that you let go of the entire endline when you get to the last two meters.

## 08 EMERGENCIES

In an emergency situation it is important not to panic, and to react purposefully and goal orientated.



*Especially in very gusty conditions the kite can overfly its pilot. This can be corrected by powering up the kite by pulling the bar towards you or pulling in the leader lines (red and green). It is also possible to counter the kite's overflying, or get it back into the wind window by flying it back and forth.*



*Should the center of the kite collapse towards the pilot (e.g frontstall) it is important to activate the quick release before it opens again, as the kite can develop a lot of power when it opens again in the wind-window.*



*A backwards flying kite (backstall) can be recovered by depowering (pushing the bar towards the kite). In very light winds you can grab hold of the adjuster and give short effective pulls to accelerate the kite.*



*If one is in danger of drifting away from the shore with an un-relaunchable kite, then it may be prudent to abandon the kite and swim back to shore if possible. Otherwise it is wise to stay with your kite, as it will make you easier to spot for rescuers.*

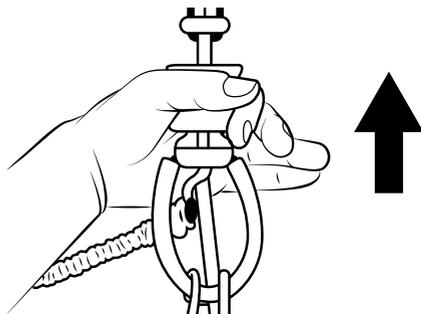


*Caution: It is very easy to get caught up in the bridle lines that are floating around. Avoid unnecessary swimming movements. A line knife in your harness is a very useful tool in a worst case scenario.*

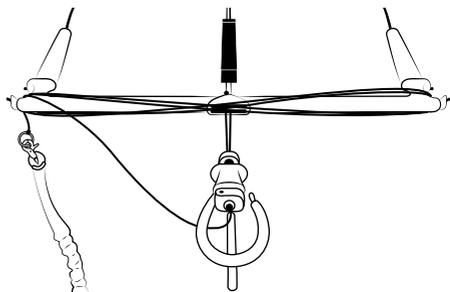
### 08.01 Self-Rescue

Packing down in deep water is only recommended for experienced kites and should be practiced beforehand.

- 1 Activate the Quick Release.

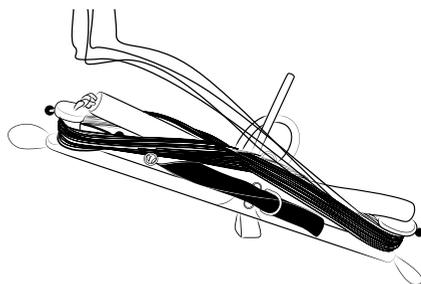


- 2 Work your way up the safety endline to the control bar. Wind the loose endline round the bottom of the bar in a figure of 8.



**Tip:** The flagged out kite can be pulled behind you on the safety leash when swimming back. However, this needs a lot of strength and is only recommended for very short distances.

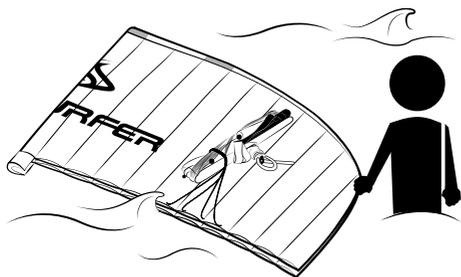
- 3 Now roll the flying lines onto the bar and secure them with the bungsies or even better using a half hitch.



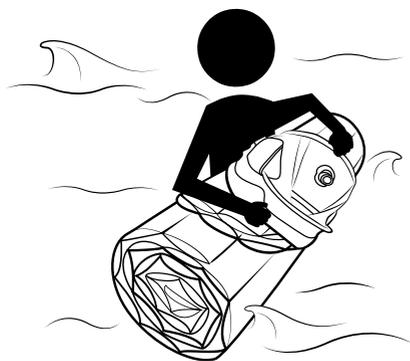
- 4 Grab the kite.



- 5 Lay the tips on top of each other, and then the bar on top and roll up the kite. Be careful with the bridle lines and stow them as best you can within the two halves of the kite when rolling it up. You can open the deflate valves to make rolling it up easier.



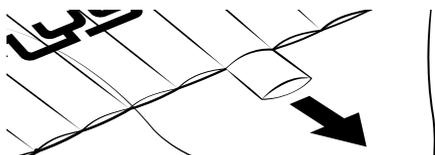
- 6 Secure the package with the harness.



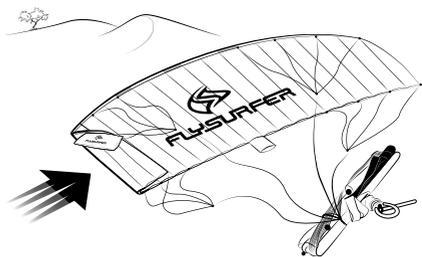
## 09 PACKING UP

A FLYSURFER kite can be packed into its bag very quickly. It is important that the bridle is securely packed inside the kite and the bar never gets into or goes through the bridle lines.

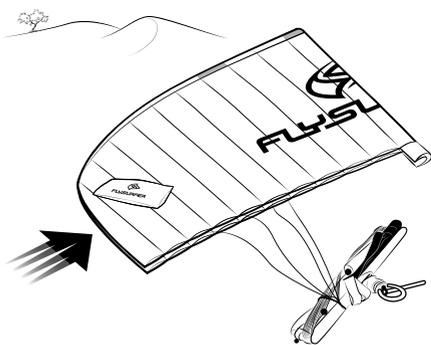
- 1 Open the deflate valves.



- 2 Wind the lines round the bar until you get to the mixer. Secure the lines with the elastics or a half hitch. Keep hold of the bar, or put it down somewhere out of the way of the bridle lines.

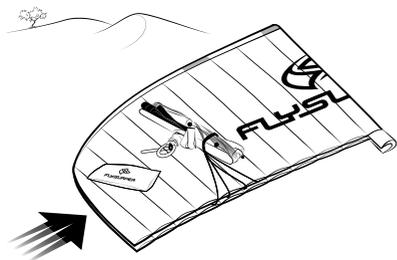


- 3 Fold the kite in half along the middle (tip on tip) and make sure that the bridle is inside both halves. Also make sure that there are no bridle lines over the outside skin.

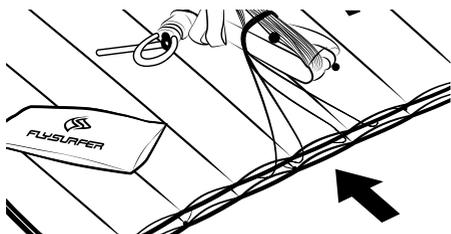


**Tip:** If you do not want to roll a wet bar into your kite, there is a method to attach the bar to the outside of the bag. Fold the kite in the middle (tip on tip) and then roll up the kite, including the bridle, and put it into the bag. Then roll up the bar and attach it to the outside of the kitebag.

- 4 Lay the bar on-top of the kite and a bit away from the tips.



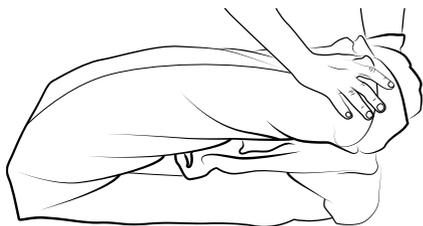
- 5 Throw the bridle lines in between the folded kite.



- 6 Roll up the kite around the bar. Make sure that no sharp objects on the beach damage the cloth.



- 7 Close the deflate valves carefully and fold the kite on both sides of the bar and put it in the kitebag.



## 10 KITE CARE

FLYSURFER kites are very durable and very UV and saltwater resistant. With proper care, your kite may last even longer. Eventual color changes of the cloth can be caused by environmental causes, UV-exposure, mechanical strain as well as it getting dirty. A color change has no influence on the flight characteristics whatsoever and is not covered by warranty.

### Do not leave the kite exposed to the elements.

People who pack away their kite right after a session, or for a longer break, will minimise the amount of time the material is exposed to the sun and flapping in the wind, extending the "active" lifespan of their kite.

### Drying

If a kite is packed away wet and left for a long period of time it can develop ugly mildew spots, rust on the metal parts or color bleeding of the cloth. This does not effect how the kite performs, but will reduce the value of your kite. In extreme cases the kite may get mouldy. To dry, simply continue to fly the kite until the canopy is dry.

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*Tip: Drying of the kite can be accelerated when the kite is flown with an open air drainage valve on land. Otherwise a fan or hair-blower can help, but please never use hot air!*

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### Rinsing

Rinse your kite from time to time with clear water, after using it in salt water, and leave it to dry in the shade. Do not use any detergents. The warranty will be void after the use of detergents on the cloth.

### Check

Check all parts of the kite before each use. Especially parts that can wear out. Material failure on those parts can lead to further damages, or put the kiter at risk.

## 11 MAINTENANCE

The main parts that wear on the kites are the Depower Line, the Safety Endline (see the bar manual), as well as the Sparepart Lines and the pulleys. Depending on use, the flying lines and other parts will need to be replaced within the lifespan of your kite. If you do not service these parts, it can lead to damage to the kite and will void the warranty.

### 11.01 Repairing the Cloth

In case you get a small tear (e.g. through contact with a sharp object) we have included a repair kit with your kite. The area that needs to be repaired must be clean, dry and grease-free. Temporary repairs are possible with spinnaker repair tape, but the tear should be taped from the inside of the kite. It is recommended that you round off the edges of the repair tape. A special binding agent (silicone sealing compound) for the X-Light Cloth is available through Flysurfer sales partners or directly at FLYSURFER. A repair manual is included with the binding agent. There is the possibility to have a professional repair done by us. We can exchange whole parts of the canopy, so that there will be no trace of the damage.

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**Tip:** When a tear is close to a seam (less than 5cm), we recommend using sewing to repair the damaged area.

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## 12 TRIMMING

As all lines change length over time, we have built in a way to correct the flying characteristics quickly and easily. Adjustments after heavy use over years should be done to keep the products performance and ensure a long-term use of the VIRON3.

### 12.01 Optimum trim of the flying lines

Steering (back) lines shorten over time in relation to the flying (front) lines. Underneath the floaters, the back line can be shortened or extended by using knots. Extension of the back lines is necessary when the trimmer needs to be pulled in too much to keep the kite flying normally in its intended wind range. (back-stall tendency).



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