

SPIRIT OF **AIR**®



Kite assembly and flight instructions

Introduction

Thank you for buying this Spirit of Air Kite, it has been designed to reward you with many hours of kite flying pleasure. Please take time to read and understand the instructions fully. Flying a modern sports kite is a skill that needs to be mastered, be patient, persistent and the skills will develop. Most of all we want you to enjoy this kite, so go and have some fun!

Identify Your Kite Components



Familiarise yourself with the common terms for components we use throughout this manual.

- | | |
|-------------------|------------------------------|
| 1. Nose | 7. Stand-off |
| 2. Leading Edge | 8. Dynamic Wingtip Tensioner |
| 3. Spine | 9. Bridle |
| 4. T Piece | 10. Wingtip Bungee |
| 5. Lower Spreader | 11. Bow Line (Viper only) |
| 6. Upper Spreader | |

Kite Assembly

To familiarise yourself with the kite, its parts and assembly, set the kite up inside your house completely out of the wind. Be sure you have plenty of room available.



Lay your kite out flat on the floor and locate the lower spreaders. The centre spine has a black nylon (plastic) T-piece attached to it, insert the end of the lower spreaders with the stopper into the T-piece until the stopper butts against the T-piece assembly.

This is tensioned by the bungee retainer. Repeat this step for both lower spreaders of the kite.

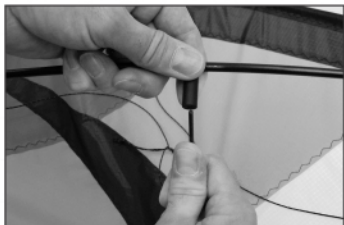
Now is a good time to check that the bridle lines are not tangled around the lower spreader. Holding the end of the lower spreader, carefully insert it into the lower leading edge connector. Ensure the spreader is fully inserted into the connector.



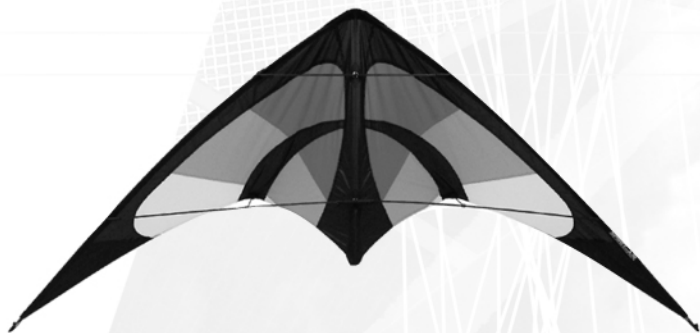
Repeat this step for both lower spreaders of the kite.



Carefully insert the upper spreader in the upper leading edge connectors ensuring it is fully inserted into each connector. Check that the bridle is free of tangles and comes off each attachment point cleanly.



Finally place the stand-offs into the appropriate connectors on the lower spreader. The stand-off when fitted should be at a 90 degree angle (perpendicular) to the lower spreader, you may have to slide the connector on the spreader to achieve this.



For disassembly, simply reverse the process.

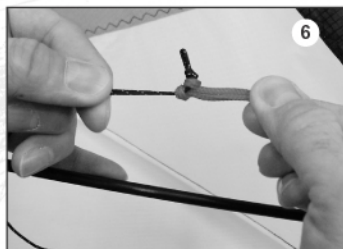
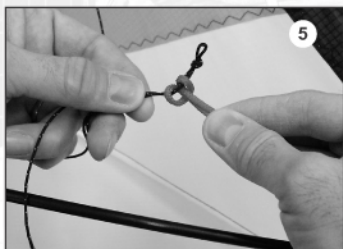
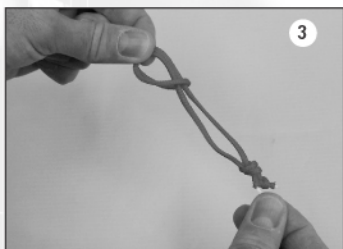
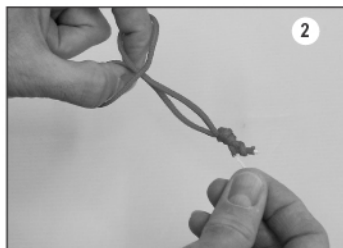
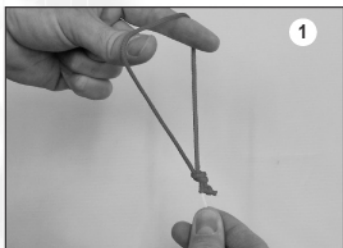
Attaching Your Flying Lines



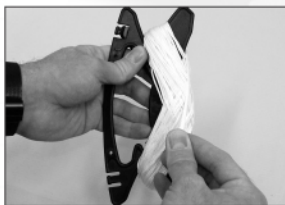
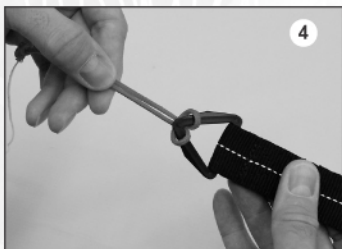
Your Spirit of Air Signature Series kite is supplied with high performance flying line and straps. The lines come pre-sleeved and equalised to the same length although some readjustment of the length may be required after initial flights.

Attach the end of the flying lines to the kite using a larks head knot as illustrated. With a helper holding the kite, walk upwind unwinding your lines fully. Let out all of the line. Make sure that the lines are free of tangles and twists and of equal length. If adjustment is required simply undo the end knot, slide the sleeving to reduce the longer of the two lines and re-knot as required.

Larks Head Knot



To attach your wrist straps, pass the sleeved loop through the nylon (plastic) loop of the strap, then pass the entire strap through the sleeved loop on the flying line. Pull the knot tight.



When winding your lines back onto the winder, wind in a figure of eight method. This prevents twists in the lines. When unwinding simply reverse the method and you should have untangled lines.

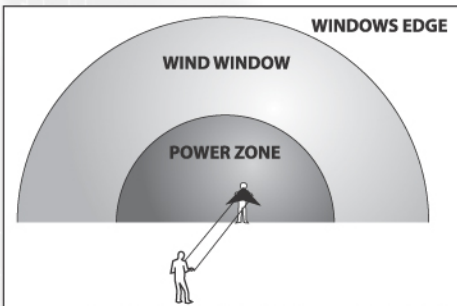
Choosing a Flying Site

Find an open park, field or beach at least 5km (3 miles) from an airport and a good distance away from roads and railway lines.

Do not ever fly a kite near electricity pylons or overhead cables as they present a serious risk of injury should your kite or flying lines become tangled in them.

Do not fly your kite over vehicles. The kite could hit the vehicle causing distraction to the driver and possibly an accident, not to mention damage to your kite. Your kite could also get caught on a moving vehicle which could drag you to the ground. This could result in serious injury. Keep away from flying too close to other kites unless stunting or kite fighting.

The Wind Window



The wind window is the area in which the kite flies. This is approximately 140 degrees in front of you when you stand facing down wind. The window will swell and shrink dependant on speed changes of the wind.

The wind window is affected by obstacles i.e. buildings, trees etc. that may be behind you. For clean wind choose a flying site free of obstacles. As a general rule, an obstacle will cause turbulent wind a distance of 7x its height down wind before it smoothes out. The area directly down wind is the power zone. This area creates the most pull and the wind is at its strongest here, as you fly the kite to the top and outside of the window the kite will slow down and generate less pull. This is the edge of the window.

First Flight

You have your new kite in hand, an open space to fly so lets do it!

Assemble your kite, check your bridles and standoffs. Make sure everything looks clear and symmetrical. Check the wind. How hard is it blowing? From what direction? Pick the place to fly which will give you the clearest, smoothest wind. For your first flight, we strongly suggest picking a day when the wind is moderate between 8 and 12 mph.

Attach your flying lines, using a simple Lark s Head knot. Unroll your lines. Get a helper to hold onto the kite and walk directly into the wind while unwinding your lines.

Launching

Assemble the kite down wind in the middle of the wind window. The easiest way to launch your kite is with the help of a friend, have your friend stand (down wind) holding onto the kite with the nose pointing upwards, **MAKE SURE THAT BOTH FLYING LINES ARE ATTACHED TO THE KITE, LET OUT FULLY AND OF EQUAL LENGTH.** Check that your area behind you and the flying area is clear of obstructions. Get ready for launch!

Pick up your straps and stand facing the kite. Check that your right-hand strap is connected to the right-hand side of the kite (very important!). If not, switch hands. Gently take the slack out of the lines and let your helper know that your about to launch. In one rapid motion as your helper lets the kite go take a step backwards while sweeping your arms down and back past your hips. Your kite should fly straight upwards. Once the kite is moving, keep your hands close together close to your chest in the neutral position and let it fly straight upwards. Wait until the kite is fairly high in the sky before trying to turn. This will give you more time and space to react before you get too close to the ground. Don t worry, you will crash, everyone does! Learn to fly in

light to moderate winds as repeated ground impact in a strong wind will damage your kite. When you crash, simply repeat the launch procedure to get back in the air. Remember to check your kite after crashing to make sure all components are fitted properly and there is no damage.

Arm Position & Control During Flight



One of the most common problems when learning to fly is arm position. Many flyers hold their arms out to the side or above their heads tugging on the lines, this unsettles the flight of the kite and control is greatly reduced. Getting it right from the start will ensure that you learn to control the kite correctly, you will progress more and learn tricks sooner, not to mention less crashing.

Standing with your arms down to your side, bend your elbows up to a 90 degree position. This is the neutral position. All movements start from this position. Pull/Push with only one hand at a time while the other remains at neutral.

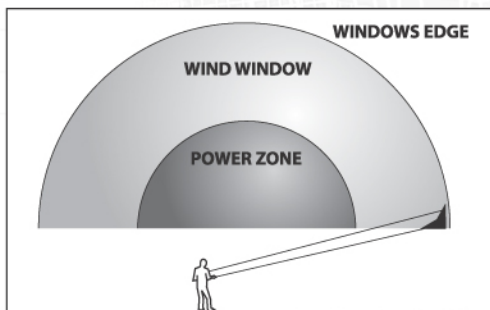
Pull Turn:

To initiate a right turn, starting from neutral, without moving your left arm, pull your right hand back to your waist then return to neutral. For a left turn simply alternate the process. Watch the kite when turning. The direction of the kite's travel is the nose of the kite. With the kite half way through the turn start to return your hand to neutral position, the kite's nose will be pointing up and will fly to the top of the window.

Push Turn:

Another method of controlling your kite is a push turn. In the neutral position, push your right hand forward and the kite will turn left. Pushing your left hand forward turns the kite right. After every movement return your hands to neutral.

Landing



By understanding the wind window and the basic controls of your kite you are ready to make a controlled landing. Fly your kite to the edge of the wind window and follow the edge down until your kite lands on its side on the ground. To aid in the landing of the kite in moderate winds, as the kite nears the ground, take a few steps forward to release pressure in the sail of the kite. This will slow the kite down and stall the kite.

Do's and Don'ts

- ✗ Don't fly your kite if there is a risk of a thunderstorm.
- ✗ Don't fly your kite near overhead power lines.
- ✗ Don't fly your kite over people or animals.
- ✗ Don't run with your kite in order to fly it.
If you need to run there is not enough wind.
- ✗ Don't fly your kite over 60m (200ft) altitude or within 5km (3 miles) of an airport.
- ✗ Don't put your kite away in its bag for a long period of time if it is wet, allow it to dry out naturally in a warm room before you pack it away.
- ✗ Do be patient, flying skills take a while to master.
- ✓ Do have serious fun.

IMPORTANT

Learn to fly in light winds as repeated ground impact in a strong wind will damage your kite. When flying in strong wind more robust flying lines than the ones supplied will be required.

The designers, manufactures, wholesalers and retailers of this product can in no way accept responsibility for damage or injury caused by the use, misuse or abuse of this product.



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