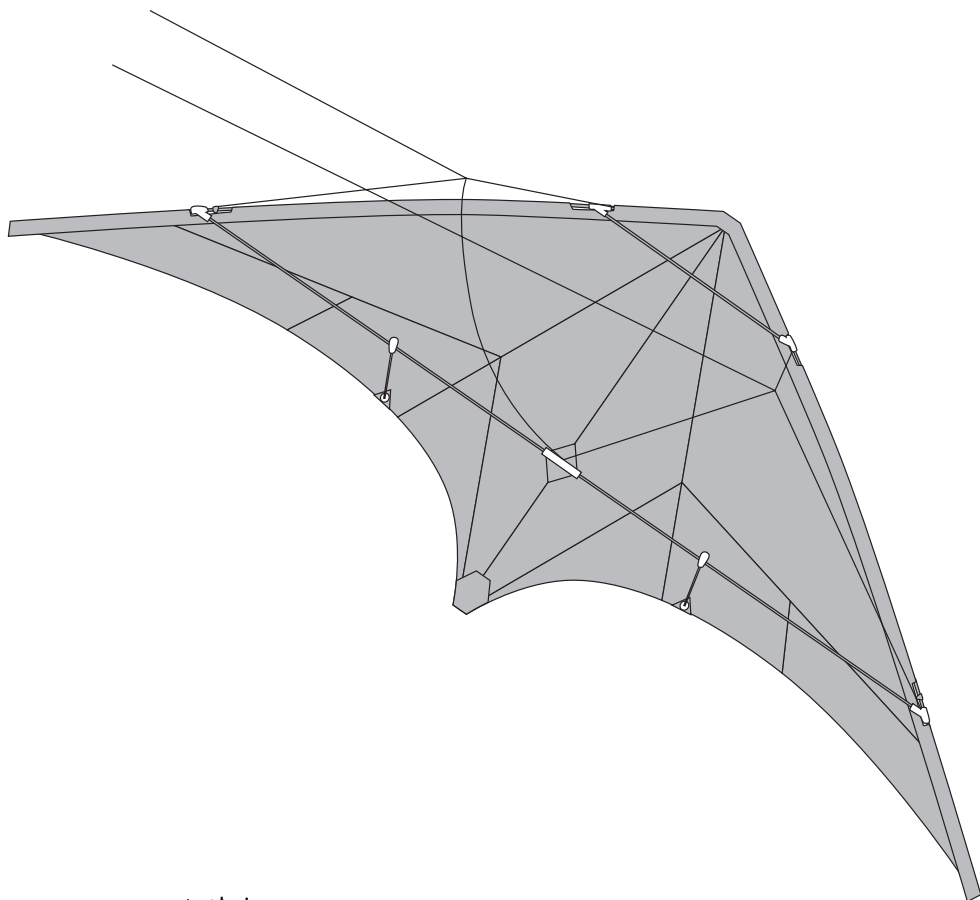


# **RAPTOR**

*by premier*

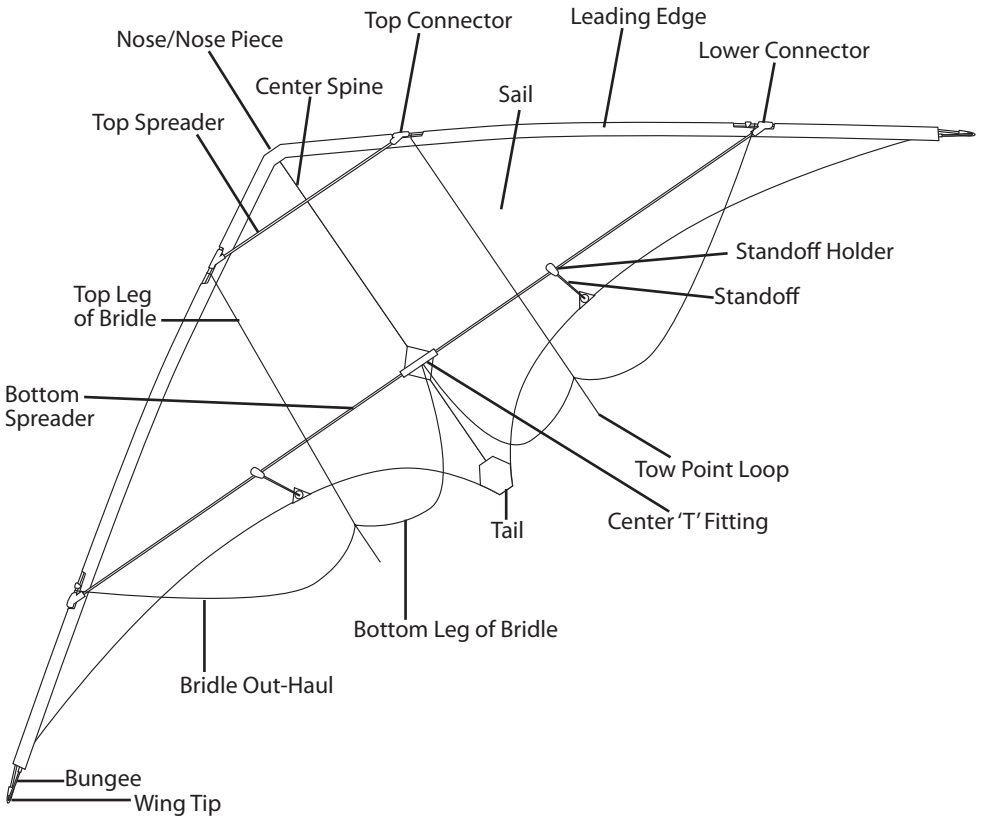


**PREMIER KITES**

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Congratulations on your purchase of the Raptor sport kite. The Raptor is a high performance sport kite capable of flying in a wide wind range. Sport kites launch, land and fly differently from single line kites. We strongly suggest that you read the instructions enclosed and become familiar with the assembly and control techniques of the Raptor.

### Names of Parts



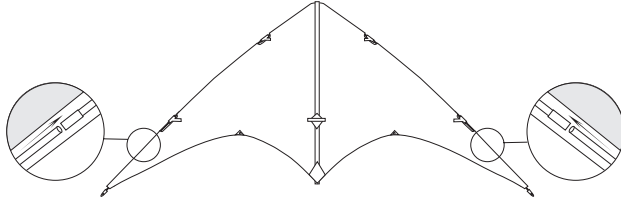
### Warning - Safety First

Be sure to avoid flying near cars, people, power lines and airports. Stunt kites can move at high speeds and are capable of inflicting damage on people and property. Both the kite and flying lines represent potential hazards. The kite and line can hit or cut with high force while moving at high speeds. Use your stunt kite with extreme care. Flying safely is your sole responsibility.

## Assembly Instructions

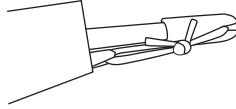
### Step 1:

Remove the kite out of the bag. Lay the kite out and extend the Sail. In the Leading Edge is a Ferrule. Connect the Leading Edge Struts on each side by sliding the Lower Leading Edge Rod into the Upper Leading Edge Strut Ferrule.



### Step 2:

Stretch the Bungee over the Wing-Tip arrow nock. Repeat on the other side.



### Step 3:

Stick the Lower Cross struts into the Center T-Fitting, making sure the Bridle is not tangled around the struts.

### Step 4:

Insert the Upper Cross Strut into the Top Connectors.

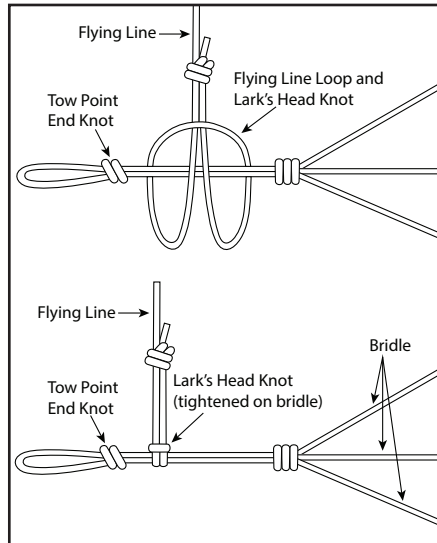
### Step 5:

Insert Standoffs into Standoff Holders. Make sure Standoff Holders are directly behind the Standoffs so the Standoffs are perpendicular to the Lower Cross Strut. If the Standoffs look crooked to the Lower Cross Strut, simply slide the Standoff Holders along the Lower Cross Strut until they look straight. Lift the assembled Raptor off the ground by the kite's Tow Points and make sure the bridle is not tangled or twisted underneath a Cross Strut. The bridle attachment points should come directly off the knots on the kite's right and left Leading Edges and the Center Spine.

## Connecting Flight Lines

Your kite is now fully assembled and ready to fly. All you need to do is attach your flying lines. Attach flying lines using a larks head knot. (See below.)

Your Raptor has a bridle that is pre-set at the factory and will never need adjustment. To attach your flying line, tie a simple over-hand loop at the end of each of your handles. With the loop, make a simple larks head knot as shown in the diagram and pull it tightly to jam on the tow point End Knot. Repeat this to the other side. You are now ready to fly.



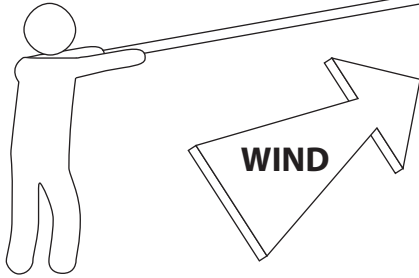
## Pre-Flight

Place your Raptor on the ground with the kite's back against the ground. After hooking your lines up to the bridle points, unroll the lines all the way to the end. Hold the flying straps together and make sure your lines are even. It is important that whenever you fly your kite that the two flying lines are exactly the same length. If your right line is longer than your left line or visa versa, your kite will be hard to control. Your lines come pre-tied at the factory to even lengths. If they have stretched or are different lengths, simply shorten the longer line to match the shorter line.

## Learning to Fly

### Step 1:

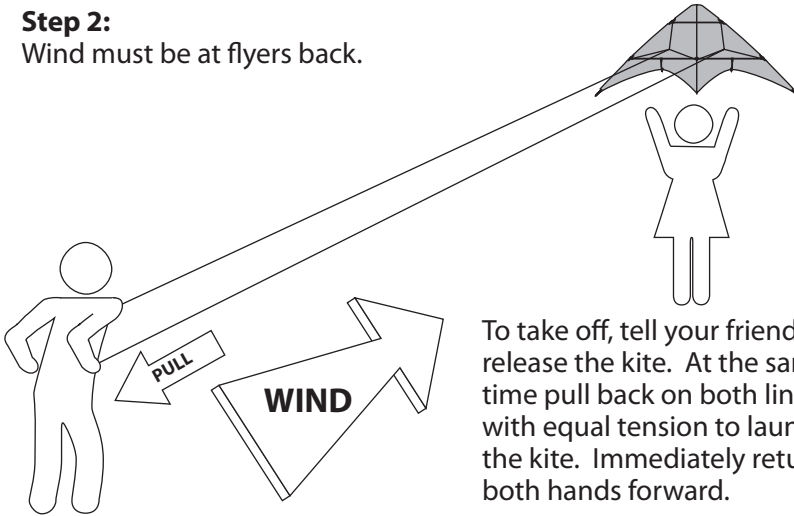
Lines must be out and adjusted to equal lengths before launching.



Make sure the person holding the kite is behind it and pointing the nose skyward. Keep your hands forward and parallel just before launch

### Step 2:

Wind must be at flyers back.



To take off, tell your friend to release the kite. At the same time pull back on both lines with equal tension to launch the kite. Immediately return both hands forward.

### Solo Launching

With first flights it is easiest to have a helper toss the kite into the air. When flying alone stake your handles or straps to the ground with an old screw driver or tent stake or anything that you can push into the ground. With the lines completely unwound attach your kite. With the lines anchored and under tension, the kite will stand on its wing tips. Tilt the nose of the kite back 45 degrees so the kite doesn't accidentally self launch.

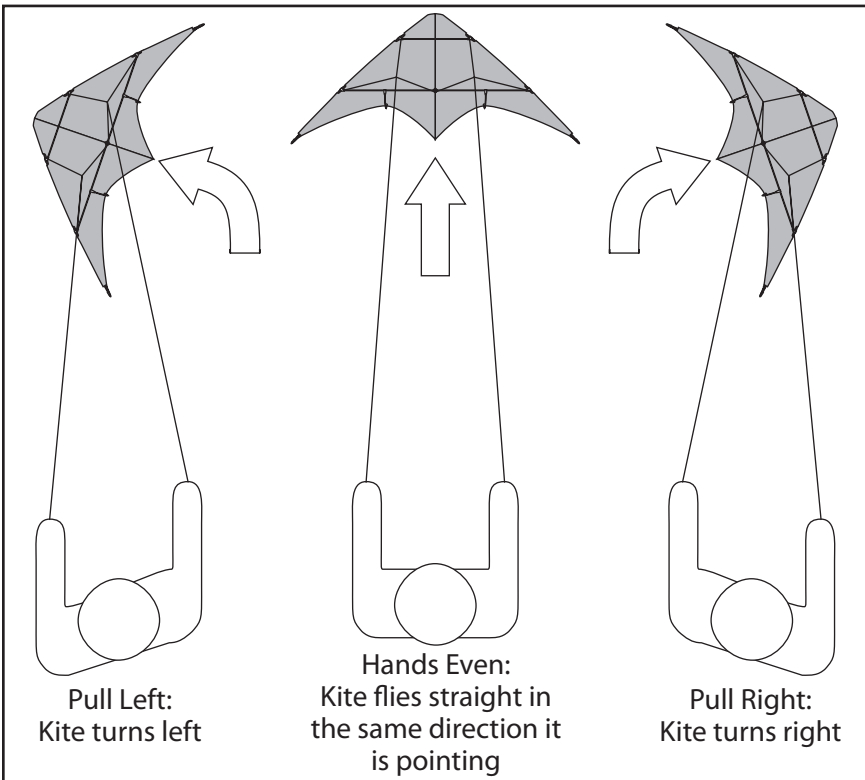
To launch the kite, pull both lines until the kite stands up straight. Then pull back both lines with equal tension and the kite will launch straight into the sky. Remember to return both hands forward.

## Control

On your first launch, keep your hands next to each other and let your kite ascend as high as possible. If your kite wanders to one side, make corrections by pulling on the opposite control handle. A stunt kite turns towards the same direction it is pulled: Pull right - the kite turns right, pull left the kite turns left. As a beginner, concentrate on steering towards the sky and maintaining plenty of altitude before doing complex stunts.

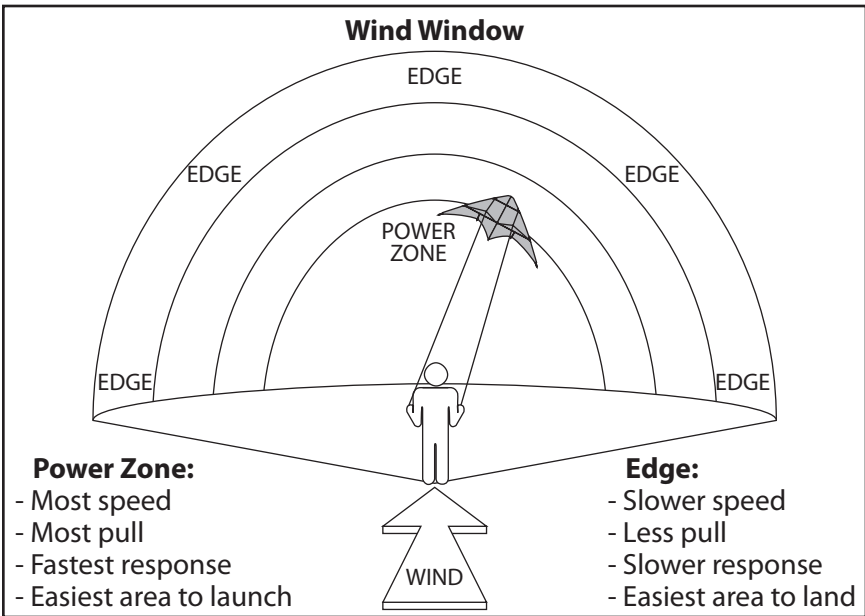
The most common problem a beginner has is over controlling their kite. Only a few inches of pull is needed for maneuvering. If you continue to pull to one side, your kite will make a loop. The further you pull back the line, the tighter the loop will be. At any point in the loop or turn, you can even out your hands and the kite will continue in the direction the nose is pointing.

After doing loops, your control lines will be twisted. This may seem troublesome, but don't worry, you still have control of your kite. To untwist, simply fly loops in the opposite direction.



## Maneuvering in the Wind Window

The Wind Window is an area of the sky where sport kites maneuver. The Window is shaped like a half dome. The size of the Window changes with the wind speed. Higher winds produce larger Windows. Your kite will react differently in various parts of the Window. The Power Zone is where your kite will pull the most and have the most speed. This is where you will have the most success launching your kite. On the Edge the kite is angled away from the direct wind. This lowers the speed and pull of the kite and makes landings easier. The extreme edge is the point where the kite can not move forward anymore. In lighter winds your kite becomes a victim of gravity and sinks to the ground. In higher winds your kite can hover on the edge and retain its position in the sky.



## Landing

You will soon notice that as the kite flies to the edge of the Window, it slows down and eventually stalls. Maneuver the kite to the outermost edge about a foot off the ground and run toward the kite while throwing your arms forward. Your lines will go slack and the kite will gently land. For an advanced maneuver, try landing your kite on its wing tips. When your kite is about a foot off the ground, rotate the nose skyward and run forward, keeping your hands in front and the line equal. The kite will lose wind and land on its wing tips. You are now ready to relaunch.

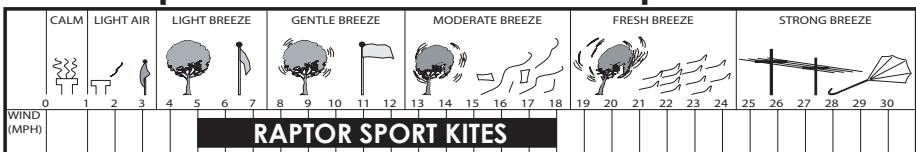
## Where to Fly

Find a flying field that is large, flat and wide open. Look for areas where there are no large obstructions interrupting smooth flowing wind. Obstructions, such as trees or buildings, add turbulence and reduce wind speed near ground levels. Determine the wind's direction by throwing grass or sand into the air. The direction of the wind will determine where your flight area will be and where you will set up the kite. Winds from 5-18 M.P.H. are ideal for learning how to fly your Raptor Sport Kite.

## Beaufort Scale

Wind Speed	Description	Specifications for use on Land
0-1	Calm	Calm; smoke rises vertical.
1-3	Light Air	Direction of wind shown by smoke drift, but not by wind vanes.
4-7	Light Breeze	Wind felt on face; leaves rustle; ordinary vanes moved by wind.
8-12	Gentle Breeze	Leaves and small twigs in constant motion; wind extends light flag.
13-18	Moderate Breeze	Raises dust and loose paper; small branches are moved.
19-24	Fresh Breeze	Small trees and leaves begin to sway; crested wavelets form on inland waters.
25-31	Strong Breeze	Large branches in motion; whistling heard in telegraph wires; umbrellas used with difficulty.

## Optimum Wind Conditions for Raptor Kites



Note: Wind Conditions aloft may vary considerably from those found near ground level.