VX One Speed Guide

North American Champion and North Sails Expert Mike Marshall explains how to sail this exciting sportboat well.

Who sails a VX One?

This is the nuts and bolts of VX One sailing. First off, VX sailors are really fun and we all have a blast sailing this boat. Even on a day when we can’t sail, we have a good time. One reason the class is gaining in popularity is that you can sail it with either two or three people, and at a wide variety of weights. Most people sail with three, and the accepted class weight is around 420 pounds. I have been in the top three at major regattas sailing with just one crew, and had great results at weights ranging anywhere from 380-450 pounds.

What’s involved in crewing?

The boat responds very well to hiking, so it’s important for the entire team to be physically fit. Pulling the spinnaker up and down is the hardest job, so put your strongest teammate in the middle. Sailing with three, jobs are divided up as follows:
**Upwind:** the forward person adjusts the self-tacking jib and the middle crew trims main. **Downwind:** forward person adjusts weight (both fore and aft and side to side) to keep boat flat and fast, adjusts the jib as needed, and trims the kite during sets and douses. Middle hoists/douses the kite and trims it the rest of the time.

Sailing with two, the helm handles the mainsheet and also takes the spinnaker sheet during sets and douses.

**Top VX speed tip?**

You just can’t get the boat flat enough upwind. Hiking harder will make you flatter, but if you aren’t able to do that ease the main out farther than you think, and then pull the heck out of the vang. Oh yeah, and hike HARD.

**What should buyers know when choosing a boat?**

There are two builders, McKay and Ovington. Any of the newer boats (above #150) are quite similar. Below that number, the boats are a bit heavier. You are allowed to take weight out of the keel to bring them down to minimum weight, but it’s a little extra work and there is a limit to how much you can take out.

**How does a VX get around on land?**

For just one boat, the load is light and you can pretty much tow it behind anything. It’s got an aluminum trailer, and the keel goes up and down. So you put the boat on the bunks, put the covers on, put the mast on top, and head off to the next regatta. It’s a similar load to a Lightning. If you are traveling more than an hour, it is a good idea to take your keel out.

**How many sails are required?**

Three sails, made of polyester cloth. Our goal is to keep costs down. There was a push in the class to go to Aramid, but a brand new polyester sail is going to be better than an older Aramid sail so we think it’s more important to be able to buy new sails more often. That’s also why we only offer three sail options: one main, a jib, and a spinnaker.

**VX One Tuning**

**What are the keys to rig set-up?**

The VX has uppers and diagonals, as well as checkstays that attach to the top of the vang, and balancing the tension between them is crucial. Set your rig tension to the tuning guide’s base numbers for the conditions before leaving the dock. Once on the water, fine-tune the uppers so the leeward one just goes slack when you’re sailing upwind. That gives you enough prebend, and enough headstay sag or headstay tension for the conditions. Total range is 18 turns from light air to really windy.
Once I get my uppers correct, I continue to sail upwind and overtrim the main a few clicks. The overbend wrinkles should go about 50% of the way back. If they’re going above the spreaders and more than 50% of the way back, I immediately put a turn or two on the diagonals. If they look okay at the spreaders, but they’re going more than 50% of the way back through the window in the main, I put maybe one turn on the checks (the whole range should only be one to two turns, so if you are doing more than that, your base tuning is off). The diagonals will go through about 10 full turns of adjustment up the range.

For more detail, read the Tuning Guide. And don’t just count turns; the key is to look at the main while tuning, to dial it in. Then go sailing!

![Sailboat](image)

**VX One Upwind Sailing**

Upwind the front person adjusts the jib sheet and car. It’s self-tacking, but sheet tension and car angle are critical to boat speed. The middle person trims the main, which also controls angle of heel. The driver adjusts vang and cunningham.

**Which is better, sailing high or fast?**
Sailing fast is much better, but the boat has to be flat. Keep the jib telltales flying 100 percent of time; don’t let the windward one dance until you are overpowered and have to ease the jib out to keep the main from backwinding.

**Upwind, where does the crew sit?**

Keep crew weight as far forward as possible. If I take three big waves over the bow in a row, everyone moves back a half body width. Otherwise stay as far forward as possible.

![Sailing boat](image)

*Tim Olin*

**How do you trim the VX mainsail upwind?**

Unless we’re overpowered, I trim it in until the top telltale just stalls. Once we get overpowered, mainsail trim doesn’t matter—boat heel does. Ease it out as much as you need to in order to keep the boat flat.

**How do you trim the VX jib upwind?**

The top of the upper leech should be parallel to centerline with the telltale flying 95% of the time, and the jib car should be sitting at 7-7.5 degrees out from centerline until it’s time to depower. Start depowering by moving the car halfway down the track (10-13 degrees off
centerline); I like to keep the sheet on as long as possible.

The standard attachment point on the clew is the fourth hole up from the bottom. In breezier conditions, move down a hole or two. Jib halyard tension is key in the VX One and should be played constantly, especially in puffy conditions.

When you do have the main eased to keep the boat flat, don’t overtrim the jib. If the main starts luffing, it’s backwind from the jib so it is time to ease!

**How do you shift gears upwind?**

Put the bow down and go faster! Off the starting line, it’s so hard to consistently sail the boat high and slow that you’re better off extending away than trying to pinch someone off. Shifting gears in this boat means figuring out that you’re too high and not fast enough. The faster you go, the more effective the keel and rudder are so the higher you will point.

**Who says what when sailing upwind?**

On our boat, the forward crew talks about pressure while the middle talks about boat traffic and speed. The skipper has pretty good visibility, and I don’t hike hard enough... so I can look around to decide where to go.

When I sail with two, my forward crew talks about pressure and fills in my blind spots.
VX One Downwind Sailing

How fast is the boat downwind?

It feels like you’re doing a million miles an hour, but it’s also totally manageable. The boat talks to you; when it does wipe out, just let the kite out, pull the jib in, and get the bow down and the boat flat again.

There are two very distinct modes sailing downwind; lower/not hiking, and higher/hiking. The higher mode is better, but harder to maintain because it requires riding the fine line of not sailing too much distance while going fast. The goal is to stay right on the edge of control.

Where does your crew sit when sailing downwind?

The middle crew needs to be able to see the spinnaker, so that means sitting (or hiking) on the weather rail. The forward crew gets as far forward and to leeward if necessary (in light air) to keep the correct angle of heel. It’s easy to move back too soon; wait until you’re planing and hiking or taking waves over the bow. In very light air, the forward crew can sit on the floor in front of the shrouds. Don’t drag the boat’s butt in any condition. If you ever feel like the bow is up in the air, then you’re probably too far back.

Under spinnaker, how much heel should be carried?

Just enough to get one half of the hull out of the water, about eight degrees. It’s very similar to upwind.
What are the keys to trimming the kite?

Biggest key is to ease when a puff hits, even though the kite might curl a little. Trimming heels the boat over, which turns the boat up—the opposite of what you want in a puff. Easing frees the helm and allows the boat to pop onto a plane.

In theory, the apparent wind will remain constant downwind, because as you accelerate you turn down. So don’t move the kite sheet too much. In lulls, trim a bit as the driver heads up, but be careful of overdoing it.

How do you shift gears downwind?

There are two modes. Displacement (under 10 knots of breeze) and planing (above 10 knots of breeze). Above 18, it’s easy to find the planing mode. From 10-18 knots, the higher mode is faster but it’s also harder to achieve.

VX One Boathandling
**What are your top 3 tips to starting well in a VX?**

For the first five seconds after the gun, put the bow down and commit to getting boat speed up. If you do this, you’ll probably be going faster than the boats around you, so you’ll no longer need to sail high to keep your lane. If you don’t commit to the low fast mode, you’ll end up pinching and watching others sail away from you.

While in sequence, keep a small part of jib unfurled to make it easier to tack. The jib trimmer needs to be very active. I’d love the jib to come out at 20 seconds, but realistically it’s out at around two minutes to get to the right place on line and control the boatspeed.

Never slow down too much. The keel has a very short cord length, so you’ll end up sliding sideways and eating up your hole to leeward.

**What are the keys to tacking a VX well?**

Keep your crew weight forward. If you drag the stern, you’ll slow down even more. When you come out of the tack, ease both sails to keep the boat flat and powered up until you get back up to speed.

**What are the keys to jibing a VX well?**

There are two kinds of jibes: the high speed blow through, and the displacement. For the first you turn a lot faster, trying to keep the speed up. Trim the old sheet in before letting the sail blow through to the new side, and then fill it again by trimming the new sheet. It’s fast, but not conservative.

For a displacement jibe, the old sheet gets eased early and you trim on the new sheet as you’re turning. You should be about halfway in on the new sheet when the main crosses. This isn’t quite as fast, but it’s a lot less likely to get you into trouble if it’s windy or your crew is not too experienced.
How do you make a fast spinnaker set?

Turn down 15-20 degrees lower than your sailing angle before calling for the hoist, just long enough to depower the sails and get the boat flat. Then turn back up as the kite goes up. If you hoist while the boat’s heeled, the tack will fall in the water and you will shrimp. The middle crew hoists, using legs rather than arms, and it should be fully hoisted with 2-3 pulls. The forward person trims the sheet until it’s handed over to the middle crew.

If you have to stay high to maintain a lane, ease the main to get the boat flat before hoisting.

What are the keys to a good spinnaker takedown on the VX?

Pass the sheet to the forward crew so they can keep it filled right up to the douse. The middle crew pulls on the douse line; the first two pulls are easy, but once the bulk of the sail reaches the snuffer (usually on the third pull) it gets a lot harder. Try to adjust your first two pulls so that you’re just beginning the third when it gets hard; that way you can use your legs and have more power.
On any takedown where you have to get the sheet around the headstay, I like to grab the weather sheet and pull it back until the clew is just behind the headstay on the windward side. That helps the kite land in the boat, not in the water.

**How do you recover from a broach or capsize?**

I haven’t done that yet! Fingers crossed! But the boat talks to you... so when you feel the rudder cavitate, ease the main to get it under control. If you don’t catch it in time, luff the kite while trimming the jib until the boat is back under control.

**Any recommended boathandling drills?**

Setting and dousing are the two hardest boathandling moves. Practice with an older kite, and work on the timing of the pulls as well as the direction that the bow is pointed.

Also practice stopping and starting. Getting up to speed quickly can make (or break) your starts. One good check is at what speed on your Velocitek you loose flow on the foils; try to never get below that on the starting line.

**The coolest thing about the VXOne class?**

The people! The boat is an absolute riot to sail, but it wouldn’t matter if you didn’t have fun people to sail against. No matter where you are in the fleet, you’ll be crossing tacks and jibes with someone who will be sharing their war stories over a beer back on shore. Everyone is just so excited about going sailing and having fun.