

GO FASTER TIPS

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This article covers the following topics:

- Mast setup
- Mast step
- Mast rake
- Rig tension
- Spreaders
- Lowers
- Pointing
- Downwind Technique

Mast Setup.

This is the first place to start for everyone, get this right and everything else will hopefully fall into pace. I will point out these are settings used by myself, Gavin and others at CSC, and should be used as a reference but are by no means the only fast settings out there!

Mast step position.

1120mm from the front U-bolt to the front of the mast. Pre sail number 1000 this should be one hole from the front of the step, if you do not have a mast ramp under your step you should get one. Post 1000 it should be one hole from the back of the step.

Since 2013 some of the top guy have been sailing the M2e with the mast step at 1100. This is quickly becoming the norm.



Mast rake.

6050mm is what we at CSC see as the magic number. This is measured to the top of the grey rudder fitting. This number is the middle, or normal position for all points of sailing. It's what I used at the 2014 Nationals and I never touched the rake all weekend, so it's a great all round number!

Make sure to mark your forestay adjuster for this position clearly either on the foredeck or on the rope between the u-bolt and pullies leading to the forestay.

The general rule of thumb is the windier it is the more rake you need, the lighter it gets the less rake you need. If your unsure 6050 should do the job fine.

As a reference you can mark 2 more positions, one more upright at 6100 and one more raked at 6000

Rig tension.

Measured at the 6100 rake position, you should have around 60-100lb's at shoulder height on the shroud. This can be tricky to achieve depending on your stay adjusters, so anywhere close is ok, and every tension gauge reads differently.

Spreaders.

Stiff or floppy? You can remove the bolt closest to the mast on the spreader bracket to allow the leeward spreader to rotate forward when the sail hits it going downwind. This allows for better sail shape. **WARNING.** The new masts (around SN1078 ish) come with a bracket to stop them deflecting to far, so if you have a mast without this and you're prone to death rolling you may not want to do this as it can bend the mast like a banana!

Lowers what do they do?

Originally the Supernova didn't have lowers - the Superspars mast is very stiff (I always get a black anodised one as its rumoured the anodising process makes them more flexible, but I have no proof of this so it could just be a sales trick!)

Lowers are there to do one main job, control lower mast bend. As the kicker is pulled on, it pulls the boom down and also horizontally forward into the goose neck. This pushes the mast forward hence bending the mast. The bend is mainly around the bottom third of the mast. The lowers can be used to limit the amount of mast bend as the kicker is applied.

To understand where and when to use your lower first let me explain the effect of mast bend on the sail. As the mast bends it stretches the sail between the mast and leech therefore flattening it and reducing the camber.

Tight lowers: mast set to 6050, pull them tight.

Less Mast bend, fuller sail, more camber= more power, better acceleration, more drag, lower top speed.

Loose lowers: mast at 6050, with full kicker on they should just be tight.

More mast bend, flatter sail, less camber = less power, slower acceleration, less drag, higher top speed.

So now we know what the effects are, where do you want to set your lowers? Lighter helms should go for looser, just coming on tight with max kicker. Heavier helms can handle more power so can have tighter lowers. This would be my recommendation in its simplest form, set them and forget them! Most people have more important things to worry about while racing, but for more advanced sailors there is more.

The main difference is between power and top speed. Power is good off wind or in choppy water to punch through the waves, top speed is good upwind on flat water. Being one of the lighter helms I always keep mine on the loosest setting as I'm over powered most of the time anyway.

Help! I cant point.

We get this a lot and its posted on the forums regularly, so here we go....

When set up and sailed correctly the Supernova can point as high as any other single sailed boat, so it's just setup and practice. There are a lot of things that effect pointing ability, so I'm going to run through the common things.

Mast rake: Follow the setup guide and sail with 6050 or less upwind. As you rake the mast back it moves the sail COE further behind the centre board COE. This generates slightly more weather helm and helps pointing when windy.

Boom sheeting position: How far the boom is pulled into the Centre line of the boat makes a big difference. You should be looking to get the boom end no more than halfway between the centreline and the transom corner. As the wind increases the boom end should move further to the corner or just past it.

Leech tension: Too little and you will have no power, too much and you stall the sail. The rule of thumb is to have the top leech tell tail flying only 50% of the time, as the wind increases this takes quite a bit of kicker! I would say a lot of the mid-lower fleet don't have enough kicker on upwind, if I'm fully hiked I usually have almost all my kicker on to keep the leech tension correct but remember to let it off in the lulls.

Strop length: this has a key effect on the last 2 points above. If it's too short then you will probably be pulling the boom in too far, too long and the boom will not come in far enough. About 600 ls what I use.

Boat speed & heel: To make the foils (rudder, Centreboard) work efficiently and stop you drifting sideways you need boat speed and a flat boat! Unfortunately, that means hiking hard or in other words getting fit, as hiking and fitness are the same thing. I'm sorry to say 'getting fit' will improve your boat speed more than anything else.

Foot or pinch: The curse of the pond sailor is to pinch too much. Pinching in a fully battened sail is not quick, and normally your boat is not flat while you're doing it, so goes against the point above. You go slower, heel more and just drift sideways. You can sail a normal close-hauled course that's fine, but don't pinch. Mark H has shown us all that footing off 5-10degs as the wind builds is very fast if your fit enough to hold the boat flat. Not many of us can do this for a whole beat, but it can come in handy at times to foot off for a few minutes to gain a tactical advantage. In light air, make sure you gain maximum forward momentum before trying to come up to close-hauled course, or again you will just drift sideways.

Downwind Technique.

There are 3 ways to get down a run, dead down wind, about 5 -15 degs higher, and by the lee. I will ignore the first as that is not quick and should only be done for short stretches usually within 5 boat lengths of the bottom mark.

Rig set up should be mast rake off, to allow the boom to push the shroud out further allowing you to sail deeper. Kicker off, less wind the less kicker you want, as the wind builds pull the kicker on to keep the boat stable. It's also better to directly sheet off the boom ideally without a purchase - I do this by holding 2 bits of mainsheet at once from the block on the boom. This allows quick adjustment, quicker gybes, and much better feel for the wind pressure when it's light.

The norm downwind is to sail about 5-15 degs above a dead run, this lets the wind flow nicely over the sail from luff to leech. I use a wind indicator on the mast at boom level which really helps tell what angle I'm sailing downwind. If in doubt you are better sailing higher than lower, the extra speed often negates the extra distance sailed. The trick to getting downwind fast is looking behind you and heading up or gybing into the gusts, then sailing lower in the gust to stay in them longer. Learning to gybe nicely no matter what the wind, is key to this, you will see the top guys gybe more to keep in the wind and the shifts.

Over the last 2 years we have seen floppy spreaders allow the nova to sail by the lee nicely. This can be a very effective tactic when it's windy, but you need to be careful as it's easy to death roll. You should see the tell tails flowing from leech to luff (the wrong way). It's best to have the kicker quite loose to allow the leech to bend further around the shroud and heel the boat to windward. The Rooster website is the place to go to find out about sailing by the lee.

Overall, you need to be able to sail by the lee or high mode, depending on the gusts, boats around you, or mark position. There is no golden rule apart from sail in patches of increased wind, and make sure you learn to gybe! Once you know how the nova is a nice boat to gybe in any wind, if you need help then attend one of the training days as I'm sure it will be covered then.