



Inland 20 Tuning Guide

Boat Preparation

Like any racing boat, great care should be taken to keep both the hull and all running and non-running rigging should be checked and replaced as necessary.

The hull, rudder and leeboards of the Inland 20 is something that can make or break your event. Be sure to have a clean smooth bottom for your yacht.

Mast Rake

Attach a tape to your halyard and hoist to top of mast and latch your halyard ball. Hoist your jib and latch to the middle ball position. From this point, measure to the intersection of the deck and transom to get the correct reading for mast rake. The resulting distance you are trying to achieve is 28'3" for all conditions.

Mast Set-Up and Rig Tension

Spreader length and angle are two variables that will affect when and how your mast bends under sailing conditions. Both of these things are easily adjustable on most of the masts in the fleet.

Spreader Length

The length of your spreaders should be 16", that will mean that you have one hole showing from the end of the blue adjustable length spreaders.

Spreader Angle

The spreader angle will dictate how quickly the mast begins to bend under sailing loads.

The angle that you should achieve is 4" to 4&1/2" of spreader sweep. To check this dimension, take a straightedge and lay it across the spreader tips. From there, measure at a 90 degree angle from the back of the mast to the straightedge. The resulting number is your spreader sweep. Note that you want to keep the angle of both spreaders equal, so mark the threads or count your turns on each side.

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Rig Tension

Rig tension can be measured in several ways. The Loose gauge is one way to get a number reading on your shroud tension rather than using the hand tighten or wrench it down method. Reading the Loose gauge will let you know your exact tension for different wind conditions.

0-10 mph: Your shroud tension should be 200lbs on the Loose Gauge or just past hand tight.

10-25mph: Shroud tension of 300lbs will help keep the rig straight in the boat. This is past hand tight on your staymaster.

Sail Tuning and Adjustments

Mainsail

The skipper has a great view of the mainsail while in his or her racing position. The use of the flow-tales on the leech of the sail as well as the angle of the top batten are guides to the skipper for mainsail trim.

In light wind conditions, the mainsail should be trimmed to allow the top batten to be just to leeward of parallel with the boom. In medium breeze (5-12mph) the sheet tension need to be tighter and the top batten should be parallel with the boom. The flow-tale on the leech should be flowing about half of the time. As the wind increases, the skipper can pull the backstay to open the leech of the sail and de-power the sailplan. As a rule of thumb, if the water is lumpy, you want to be a bit softer on the mainsheet and in flat water you can trim a bit harder to aid with your pointing angle.

Backstay

The backstay is a primary sail control. This control will help you keep the boat in balance and on its feet. The tension of the backstay will depend on the overall conditions you are racing in. The real answer is that the skipper will use the backstay to control the helm and angle of heel for the boat.

Boom Vang

The vang is a secondary sail control for the mainsail. You should utilize the vang to allow the skipper to ease and trim the mainsail without letting the boom rise and make the sail fuller. As the breeze builds, snug the vang to allow the barn door effect on the mainsail when you ease for a puff, rather than having the boom lift and twist the mainsail.

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Cunningham

The Cunningham gives the skipper another option to de-power the mainsail. In light wind, the Cunningham should be free from tension allowing for small horizontal speed wrinkles to form along the luff of the sail. In medium breeze you will need to adjust the

Cunningham for the lulls rather than the puffs. In very heavy wind, the Cunningham should be pulled hard to eliminate all speed wrinkles and help control the draft position.

Outhaul

A small ridge in the foot of the sail when not under sailing conditions is the place to start for upwind. As the breeze builds, tighten the outhaul to create a fold on the foot.

Downwind, you can ease the outhaul to gain depth in the lower third of the mainsail.

Traveler

For 80% of your racing, you will keep the traveler at the midline. As the wind builds 14 and up, you can set the traveler down approx 3" and then use mainsheet ease and trim to keep the angle of heel correct and the boat driving forward.

Jib Settings

Clew trim position: The clewboard has several holes for your sheet attachment. The standard position is 3 holes up from the bottom of the board. In windy conditions 15+ you may choose to move one hole down to allow you to flatten the jib.

Jib Track: For light and medium conditions, set the jib track 14" off of midline of the boat. In heavy conditions drop the jib car down 17" from midline. This will help open the jib and keep the boat driving.

Jib Luff: For light air conditions, it is best to have some very slight speed wrinkles in the luff of the jib. In medium breeze you want to eliminate all wrinkles and in heavy wind conditions, you can tighten the jib luff to make sure all wrinkles are gone and the front of the jib is smooth.

Good Luck

These suggestions are a great place to start with the Inland 20 rig set-up and tune. You can make small adjustments to suit your sailing style. Any questions or concerns are encouraged and do not hesitate to contact a Quantum Inland Sails Representative with further trim and set-up questions.

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