

# ULLMAN SAILS RACING GUIDE



**Crew:** 1 man crew. For racing, ideal weight of sailor should be between 40 and 45kgs.

**Dimensions:** 2.3 meters in length, 1.13 meters in width and  $\pm 35$ kg.

**Sail Area:** 3.5 square meters.

**Class:** Restricted (hull shape remains the same from year to year)

**Characteristics:** Perfect for young teams between the ages of 8 and 15 years old who enjoy racing.

**Difficulty Level:** Beginner

## Optimist Racing Guide

In order to ensure you rig your Optimist following the proper rules, we recommend printing out the current year's regulations from the International Optimist Dinghy Association's (IODA) website [www.optiworld.org](http://www.optiworld.org). Your Ullman Sails Optimist sail is built to the purchase year's regulations.

## Hull & Foil Maintenance

An important step in any boat setup is keeping your boat clean. It's a good idea to get into the routine of washing your boat before and after sailing. To increase the performance of your Optimist Dinghy you should keep your hull free of any dirt or road grime that has gotten on your boat while traveling or while your boat was stored. Be sure to wash your foils and store them

in their proper storage bag when not in use and never leave them in the sun. The heat could warp and blister your foils.

## Sail Maintenance & Care

Sail care is also important to your Optimist Dinghy performance. We recommend that you wash your sail and spars with fresh water after sailing. Always allow your sail to dry before the sail is rolled and stored in its bag. Sailcloth will mildew if it is stored wet. The proper way to roll your sail is to start at the top and roll to the bottom parallel to the battens. When you are on the water and not sailing, do not let your sail luff for too long. The flapping wears down your sail.



# OPTIMIST



## Boat Setup

- Before launching your Optimist Dinghy check your airbags. This is very important for your safety. Plus, if you are unfortunate and capsize, a full airbag will let less water into your boat and less water to bail out. Also make sure that you have your required bailer and having a second bailer is not a bad idea.

- Make sure your mainsheet and adjustment ropes are a good length. Excess lines in the boat can cause problems when you're sailing. It is an IODA class rule that the boom bridle never exceeds more than 10 cm from the boom. This rule was created to greatly reduce the risk of a sailor's head from being caught in the bridle during tacks or gybes.

- Be sure to read through the IODA rules about attachments to the centerboard. We recommend a rope that is just long enough to pull the entire centerboard out of the water, but so the centerboard is still in the case. This will allow you to check the centerboard quickly while sailing and then put it right back without causing too much disruption.

- Adjust your hiking straps so they are not too tight and not too loose. A good position is when the 'bank' (boat edge) is around 5cm behind your knees when you are fully hiking.

- Be sure to check that the mast port, centerboard and rudder are lined up in a straight line.







**Mast Rake** Mast rake is the fore or aft angle of the mast, and affects power and pointing. As a general rule, your Mast Rake should be adjusted so that the boom is parallel with the water when you are trimmed in for optimum upwind sailing. To measure your Mast Rake, use a tape measure to measure from the top of your mast to the rear deck bottom lip. For your Ullman Sails Optimist sail, we recommend using a Mast Rake between 275cm and 285cm. Generally a heavy sailor will need more Rake (close to 284cm) and a lighter sailor will need less Rake (close to 278cm). 282cm is a good average for most sailors. Start with 282cm and adjust it as you see fit.

## Sail Ties

The Sail Ties along the mast allow you to adjust the luff curve of the sail. The IODA rules allow you to rig your sail a maximum of 1 cm from the mast. If you tie all of your Sail Ties the same length between the mast and the sail, you will keep the sail shape designed by Ullman Sails. (The shape won't change whether you have 1 mm or 7 mm between the sail and the mast – as long as each sail tie is the same). We recommend setting your Sail Ties at 3 mm in order to allow the sail to move freely.

**TIP: A trick to make sure each Sail Tie is an equal distance from the boom is to place a pencil under the knot as you tie and then pull the pencil out after tying the Sail Tie where you want it.**

The Sail Ties at either end of the boom are the most important. We recommend securing these two Sail Ties at a maximum of 8-9 mm. The other Sail Ties should all be an equal distance from the boom. This distance allows the sail to move easily from side to side.



## Sprit

The Sprit is the sail control that is adjusted the most during racing. As a general rule, try to adjust the Sprit so there are no creases in the sail. If you have too much tension on the

Sprit, there will be creases from the peak of the sail to the bottom of the mast. If you do not have enough tension, there will be creases from the top of the mast to the end of the boom. It is important to remember that in some cases, it can be faster to sail with creases in the sail. Why? Because the Sprit has a major affect on leech closure. In windy conditions, you can have creases from the clew to the top of the mast to open the leech and help depower the sail. If you are having trouble keeping the boat flat while hiking in wavy conditions, adjust the Sprit so there Ullman Sails Optimist Racing Guide – V7 3 of 5 are creases in the middle of the sail. This will help depower the sails through the waves by keeping the top of the leech open. Plus, it will keep the boat flatter so you don't have to adjust the rudder as much. **RULE OF THUMB: More Sprit for power/Less Sprit to depower.**



## Boom Preventer

The Boom Preventer controls the height of the boom and is used with the boom vang and sprit to tighten or loosen the luff of the sail. To adjust the Boom Preventer, you can tighten the line by twisting it in front of the mast. This will keep the boom from dropping down when you tension your mainsheet and vang.

Your Boom Preventer will not work properly if you tension it before your sail and sprit are hoisted. Always follow these steps before tightening the Boom Preventer:

1) Rig your sail and hook the Boom Preventer with no wraps on the nub on the front of your mast.

2) Before you raise the sprit, tighten the boom vang just enough to get rid of any slack.

3) Rig and tighten the sprit so that the red band on the sail is between the two bands on the mast. Remember there are still no wraps on the preventer!

4) Now you may tension the Boom Preventer by twisting the line to match your sailing conditions.

See the Ullman Sails Optimist Tuning Guide below for recommended Boom Preventer settings in different sailing conditions.

## BOOM VANG

The Boom Vang controls the luff tension upwind and the leech of the sail when sailing downwind and reaching. Boom vang should be just tight enough to make the top batten parallel to the boom upwind and downwind. More tension will stabilize the sail while releasing it will destabilize. Always remember never to let it off completely!



## Mainsheet

The Mainsheet not only controls the position of the boom, but also the leech of the sail upwind. It is important to remember that as you adjust the Mainsheet while you're sailing upwind, you are controlling the position of the sail AND the shape of the leech. For example, 1 cm of mainsheet trim is more than a 5 cm adjustment to the leech! When you start sailing, try trimming the Mainsheet in tight in heavy air and easing it out for lighter air.

## Leech Telltales

The Leech Telltales tell you about your mainsheet trim. The Leech Telltales should be flying straight back. If the Leech Telltales are stalled to windward, you are not

trimmed in enough. If the Leech Telltales are stalled to leeward you are over trimmed or your vang is too tight.

## Outhaul

The Outhaul controls the foot of the sail and the bottom of the leech. It is easy to adjust the Outhaul on the water and you will want to use the Outhaul to control the shape of your sail as the conditions change.

When your sail starts to develop creases from the mast to the end of the boom, it means that you need a flatter sail. Tension the Outhaul to open the bottom of the leech. When the sail looks like it has big waves between each eyelet on the foot, release foot tension to make your sail deeper and powered up.



Outhaul

**TIP: Less foot tension is usually only fast downwind!**

## Luff Telltales

An easy way to remember how to trim your sail so your Luff Telltales are flying properly is: "Up and out, let it out. Up and in, pull it in."

## Optimist Tuning Guide

Below are some general numbers for your rig tune and sail trim.

Remember these numbers are just a guide for you to use as a starting point. Also keep in mind that wave conditions will make a difference. As you become more familiar with your Ullman Sails Optimist sail, spend some time testing different settings to figure out what works best for you.

	Light wind 0-6 kts	Medium Wind 7-13 kts	Heavy Wind 14-20 kts	Extreme Wind 21+ kts
<b>Mast Rake</b>	284 cm	282 cm	280 cm	Under 279 cm
<b>Sprit Tension (crease from mast head to clew)</b>	No crease or just a few	No crease or just on top of waves	Few creases appear	One permanent crease
<b>Sail Ties</b>	Release on top and next to boom	Same space between sail and mast	Close to the mast	Release top and bottom
<b>Boom Vang</b>	No	Few	Full	Full
<b>Boom Preventer *</b>	3-4 wraps	1-2 wraps	0-1 wraps	0-1 wraps
<b>Outhaul</b>	Few creases across the boom	More creases across the bottom	No creases across the boom	Tight

\* Example of Boom Preventer Wraps:



Boom Preventer



No Wraps



2 Wraps