

The Loft 2001

PRODUCT INFO/TRIM GUIDE

The Loft... committed to research and development. The Loft is a windsurfer's company. We do not maintain a corporate structure... we do design, produce and test aggressively our original sail designs. We cannot be closer to our work, and the fruit is for YOU.

The Loft Design Philosophy

MOTHER NATURE

A windsurfer is three entities; man, fish and bird, working together as one fantastic flyer. Performance sail designs imitate a natural hybrid as accurately as possible... this has proven itself true many times over. World Speed records, World Championships, magazine tests, they all confirm; nature knows best. Like wings in flight, designs from The Loft breathe and respond **POSITIVELY FOR YOU.**

Trim. Birds do it. Fish do it. We do it. Trim for maximum lift and you experience 4X4. Trim for speed and experience Turbo. Wind range expansion... greater windsurfing efficiency and smaller sail quivers.

The Loft Development Method

BUILD, TEST, BUILD, TEST, TEST AND TEST AGAIN.

There is no other way. Build it and test it. Our prototypes are built near the beach at our Tarifa development center. One of a kind test protos are produced and tested against other sails to identify performance progression. Testing is serious... we use identical gear except the sail design variation. We test in different winds, on different courses and with trim adjusted to accurately identify design progress. There are harmonics in the rig... get them right and the rig becomes life-like. The parts... mast and panel curves, mast compatibility, batten tuning, material selection and building details. The R&D process optimizing the parts harmonically is The Loft... where original windsurfing sail design development energy resonates. Our 2001 designs are efficiency simplified. The Loft has been proven to be on top**. The Loft is the new, progressive design source in Windsurfing. Take the fruit and enjoy.

The Loft 2001 product range:

Lip Freewave Concept: 6.0, 5.5, 5.0, 4.5, 4.1 and 3.7.

O2 Freeride Concept: 9.6, 8.4, 7.4, 6.6 and 5.9.

Simplicity. We do not offer 8 sail lines because 8 sail lines are unnecessary. Our two well developed sail lines cover Wave (onshore and sideshore), Freestyle and Slalom windsurfing disciplines. The wind range of our 2001 sails is unmatched. Take the fruit... sails from The Loft 2001 are tough, light and tuning sensitive... trim for power, or tune for ease of maneuvers. It is simple, enjoy different styles/conditions with one windsurfing sail design through tuning.

**American Windsurfer and Wind (France) magazines 2000 Equipment tests.

The Loft 2001 Tech Lip and O2

DESIGN

-Panel/seam layout. The O2 Freeride Concept and the Wave Lip share the same functional layout: one vertical and three to four horizontal seams.

-Materials and integration. Grid Xply exterior, monofilm interior. Integration; panels (overlap) at the corners increase integrity with minimal weight.

-Shaping... it is the seams!. A single vertical and three to four horizontal seams (under the battens) shape the 2001 designs effectively; forward and stable. The new reflex horizontal curves in the body soften the leech. The result is easy stable power and soft handling.

-Batten systems

Tuned polyester rod battens function harmonically with the new 2001 seam shaping.

Microbattens stabilize the upper leech for quiet performance even when tuned for and exposed to the extreme upper end.

-2001 Protection.

-Mast/board protector. 1cm closed cell foam up one half meter. Real protection where protection is needed.

-Neoprene foot batten rear end protection & soft PVC edging along the sail foot.

-Maximum attention given to seam integrity over the entire sail with glued on reinforcement materials; optimal monofilm/laminate construction technique. Compare our attention to construction detail... you will see the difference.

-Lufflex mast pocket material: light, water and wear resistant.

-SENSITIP. A totally new functional approach to tip design. Light, uncomplicated, durable, easy. Natural in its twist character as well as its outline. The SensiTip is tip sensitivity... like no other tip system.

For SensiTip inspection, look into the opening on the right side of the mast pocket top (no mast). For removal open the velcro retaining strap and pull the SensiTip rod free of the sail.

To insert, first place the SensiTip rod down into the mast pocket, then fully up into the pocket (the SensiTip's pocket entrance can be seen through the small window in the mast sleeve top, right side). Pull back the lower end of the SensiTip rod and place it into the envelope keeper. Close the velcro strap. Thats it!

Lip Freewave Concept

The Lip is performance windsurfing, wave oriented... power AND range in one stable, easy package. The aspect ratio is high for freedom of movement. The materials selected and the construction details built into the Lip resist should the wave become the rider... 5mil narrow Xgrid exterior and 175 monofilm interior. Entirely glued onto the lower body is a dacron scrim reinforcement arc protecting the sail from the board's nose.

Five polyester rod battens are tuned for wave performance in the Wave Lip 2001. The batten layout is low oriented to maintain a low swing weight. Two micro battens are worked into the upper leech to control the leech exhaust.

The Lip is built with a 3ply foot, the layers graduated towards the foot. All seams are reinforced with 17mm or wider marking cloth tape. The luff edge is built with a 5cm 2ply continuing all the way up the luff to the head. Compare our construction details with other brands and you will see the difference.

The 2001 Lip is super stable with an exceptionally soft expanded wind range; power to get out in the low end and smooth handling in the upper end; A complete progressive Wave design.

The O2 Freeride Concept

“Freeride”: no cams; easy to rig and SOFT rotation.

“Concept”: NO LIMITS. New progressive performance beyond the sum of its parts... lower aspect ratio, new reflex horizontal seam shaping and the new simple, functional Sensitip head batten. The O2 is built with tough 5mil narrow Xgrid below the boom. Above the boom the O2 materials are lighter; 4 mil wide grid Xgrid on the exterior, 125 mono interior.

Three carbon tubed battens shape and stabilize the O2 body. A trio of microbattens silence the leech. Six battens in the 5.9 up to the 8.4, and 7 battens in the 9.6... the O2 is stable, light and fast.

The O2 breathes... synergetic... its design features produce performance greater than the sum of the parts... pump and the O2 responds... a living wing.

The Loft 2001 Mast & Boom Specs

Lip Freewave Concept

Size	Mast	Boom	Mast Rec.	Compatible Masts
3.7	372	151	400/19	370, RDMs
4.1	387	158	400/19	370, 430, RDMs
4.5	405	166	400/19	430, RDMs
5.0	421	173	400/19	430, RDMs
5.5	441	181	430/21	400/19*, RDMs
6.0	455	187	430/21	460/25, RDMs

All sizes vario top

O2 Freeride Concept

5.9	444	188	430/21	400/19*, RDMs
6.6	467	199	460/25	460/24, RDMs
7.4	494	211	490/28	460/25*
8.4	528	226	520/29	510/30
9.6	553	234	520/29	510/30*

*50cm or longer vario mast extension recommended.

All sizes fixed top

SAIL TRIM

Like a Formula 1 racing car, or a musical instrument, **tuning your equipment is critical to performance.** Your sail has printed info regarding mast and boom lengths and the recommended mast. The recommended mast is your best choice to optimize windsurfing performance. Trim begins with the right mast and noting the recommended mast and boom lengths. Sail trim has two primary variables; downhaul and outhaul.

DOWNHAUL

Downhaul tension is of critical importance to rig trim; setting the rig for your windsurfing conditions. All rigs respond favorably to increased downhaul tension for high wind sailing. For strong winds it pays to be radical. More **downhaul tension** equals **easier handling and greater speed** in strong winds. An 8:1 hook system is recommended for easy application of strong downhaul tension; critical to strong wind performance.

When overpowered, tension the downhaul. High tension makes the sail's leech (rear edge) open and free, releasing power from the top of the sail, making the rig easier to handle and increasing speed. Greater downhaul tension flattens the body and the sail's leading edge. Be aggressive with downhaul tension as the wind rises. Sails from The Loft, as well as most other well-designed sails are built to accept high downhaul tension. Maxed downhaul tension will make the leech soft from the head all the way down to the boom, which is the correct trim should you find that the sail too sail large for the wind strength.

Should the wind drop, or should your sail be small for the wind strength, **less downhaul** tension will firm up the leech and make the sail body fuller. This reduced trim generates **greater low end power.** Note that as soon as the winds are sufficient for easy planing, it is a good moment to experiment with more downhaul tension. The feeling of free speed sets your windsurfing soul free. The adjustment range between ideal low wind trim and ideal high wind trim may be as much as 4cm.

Masts influence rig performance. It is best to use a recommended mast for the sail. If a **softer** mast is used, the rig becomes more flexible. The handling becomes easier in **high winds**, and the rig is easier to close down on the board ("closing the gap") in strong winds. A **stiffer** mast will have the opposite effect; the rig will become more difficult to close in the upper

wind range, will go **upwind** more efficiently and become more **light wind** oriented.

OUTHHAUL

The **outhaul** is the other adjustment which has direct impact on rig performance. **Reduced** outhaul makes the sail deeper in profile, generating **greater power** for light winds.

Greater outhaul tension flattens the sail profile, making the sail much **easier to handle** and faster in medium and strong winds. Flatter trim allows the sail to pass more easily through the wind. The range between ideal strong and light wind trims may be up to 3cm.

Optimizing rig trim involves more than outhaul and downhaul sail adjustments. The boom height, the mastfoot position and the harness lines also influence performance.

RIG TRIM

Boom height has a direct impact on performance. A low boom will make initiation of planing difficult. An overly high boom promotes early tail walking and makes maneuvers difficult; A good position to begin is **chest/shoulder level**.

If there is too little wind for the sail size being used, the boom is best raised to assist in the initiation of planing. A higher boom places more of the windsurfer's weight onto the rig, and less on the board. Consequently, the board has a greater capacity to lift and plane.

If the wind is strong for the sail size, lowering the boom will give the windsurfer greater control. With a lower boom position, the rider's weight becomes more board oriented, increasing board control in rough conditions.

Generally, if you feel overpowered, try more downhaul, more outhaul, a lower boom and the mastfoot further forward. If you want to trim for more power, free the downhaul 1 or 2cm, free the boom 1 or 2cm, and raise the boom a few centimeters and move the mastfoot back.

Harness lines are your power transfer, so their position and length will affect rig performance. The harness lines bear the diving power from the rig, allowing the windsurfer to be free!. Finding the right position for the harness lines on the boom is a question of balance.

Windsurfers who are starting with the harness usually like to place the lines too far forward to reduce the likelihood of being catapulted. Lines

too far forward will limit speed, keeping the sailor too far forward on the board. If the lines are too far forward, the back arm becomes fatigued. If the lines are too far back, the forward arm becomes fatigued.

Try sailing with no hands!. If the lines are in the correct position, you will be able to sail for some moments with no hands!. If you reach for the boom first with your back hand, the lines should be moved back. If you reach for the boom first with the front hand, the lines should be moved forward.

Lines which are placed further apart will give the windsurfer a feeling of greater stability. Wide lines (30cm+) comfortably harness the sail's power and are generally better suited to beginning windsurfers.

Narrow harness lines (18cm and less) transfer power to the sailor more directly, more critically. As the harness lines are placed closer together on the boom, they make rig trim more critical relative to the power center. Racers tend to have narrow harness line placement.

Harness line length also influences performance. **28 to 30 cm** from the harness lines center to the boom is a good average harness line length.

Short lines limit speed potential. Bodyweight is the power generator. Bodyweight too close to the rig, and maximum power is unavailable. Overly short lines (less than 25cm max from boom) limits the reaction time as the windsurfer encounters changing wind and sea conditions. Overly long lines (more than 32 cm) may cause arm fatigue and rather wet windsurfing as the sailor makes frequent contact with the water. A loose fitting harness affects negatively harness function and windsurfing performance. Keep your harness tight!.

Batten tension is simple!. Tension the battens until the sail becomes visibly taught. Many windsurfers overlook batten tension. Full batten tension **makes the rig more stable** as well as removing wrinkles from the sail. Cammed battens may need special care as over tensioning cammed battens may result in hard sail rotation.

BOARD TRIM

The board has three trim variables; footstraps, fins and mastfoot position.

Footstrap position determines the sailor's stance on the board, and therefore the board's attitude in the water. Generally, a **wide** stance is **control and maneuver** oriented. For rough water straps placed farther apart will result in more control over both the board and the lift of the fin.

On **flat water**, both footstraps may be best located further **back** . Rear footstrap positions allow the windsurfer to **fly more** on the fin with less board in the water for greater speed potential.

Fins

Deeper/**bigger** fins are well suited for **light winds** as they generate greater lift at lower speeds. As the wind rises **shorter fins** will make the board **easier to handle**. The fin's angle to the bottom of the board will also affect performance. Vertical fins will make the board fly; better for lighter winds. Swept back fins will make the board easier to control in stronger winds.

The Mastfoot

This is where the power and the ride meet, so position is critical!. Generally, placement **forward** increases board control by taking the sailor's weight forward, more onto the board, **controlling the fin**. **Rear** positions are more speed oriented as the sailor's weight allows the fin greater ability to lift. With more of the board out of the water **speed** potential is increased.

Experience the new sensations resulting from trim alternatives, and you will **expand your windsurfing performance!**

Troubleshooting

Windsurfing is a wonderful feeling of balance. Should you feel unbalanced, try one or more of the solutions listed. One of the solutions, or a combination of them may bring balance for you!.

The board has the tendency to turn into the wind.

Try the mastfoot further forward, the harness lines further back, the footstraps further forward.

The board has the tendency to turn downwind.

Try the mastfoot farther back, a higher boom, the harness lines further forward, a bigger fin, the footstraps farther back.

The rig tries to catapult the sailor.

Try more downhaul, the harness lines farther forward and farther apart, a smaller sail, more outhaul, a softer mast.

Slow, stuck to the water feeling.

Try the mastfoot farther back, the boom higher, more downhaul, the harness lines farther back and closer together, a bigger fin, the footstraps farther back, a bigger sail, a stiffer mast.

Difficulty to get planning.

Try the boom higher, mastfoot farther back, bigger fin, bigger sail, harness lines back, less outhaul, footstraps farther back, a stiffer mast.

The board stands on the tail in strong winds (tailwalking).

Try more downhaul, more outhaul, mastfoot farther forward, a smaller fin, the footstraps farther forward, a softer mast.

The board spins out easily.

Try more downhaul, more outhaul, straps further forward, a bigger fin, mastfoot further back, a softer mast.

Difficulty closing the sail down onto the board.

Try more downhaul, the mastfoot further forward, a smaller fin, a softer mast, the footstraps farther back, the harness lines farther back, a smaller sail.

The board bounces in chop and when starting to gybe.

Try the mastfoot farther forward, the boom lower, more downhaul, a smaller fin, the footstraps farther forward, a smaller sail.

Optimizing trim for **high performance windsurfing** is a learning process which has no limits!. Improvements in one area will compliment trim improvements in other areas. Performance can always be expanded as new trim configurations are experienced. Maximizing trim is the cutting edge of windsurfing. Windsurfing is the most efficient, purest sailing form. Windsurfing is a never ending source of new sensations.... **we fly!**.

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www.the-loftsails.com