

manta⁵

Hydrofoiler SL3



MANTAS.COM

GONE ARE CYCLE LANES, THE
NAVIGATION OF TRAFFIC AND TRAILS.



GONE ARE THE WAKES, EMISSIONS AND NOISE
OF COMBUSTION ENGINE WATERCRAFTS.



HOWEVER YOU RIDE, FOR LEISURE OR HEALTH,
THERE'S A SURREAL WORLD OUT THERE
WAITING TO BE EXPLORED.



INTRODUCING THE

Hydrofoiler SL3

THE GAME CHANGING SECOND GENERATION
HYDROFOILER HAS SURPASSED MANTA5'S GOAL OF
REPLICATING THE CYCLING EXPERIENCE ON WATER.

ELEVATED BY WATER, THE NEW SL3 EMERGES AS
ONE OF THE MOST SURREAL CYCLING EXPERIENCES
AVAILABLE TODAY.



What's new in the SL3

The 'easiest foiling product on the market today'

The SL3 introduces new patent pending easy launch technology that take new riders from novice to confident in minutes, not hours.

Introducing the throttle & ride controller

Use the throttle to launch, rest, and coast along the water's surface. Pedalling is now optional.

Packed full of leading-edge safety features

New propeller guard, dual layer IPX67 battery housings, and tilt sensors that cut motor power as soon as the bike falls. SL3 riders can have full confidence when pushing the bike to its limits.

Longest ride duration of any e-foiling product (Up to 4.5 hrs) on the market

1000Wh and 600Wh Hydropack batteries are introduced. Combined with a purpose built reduction gearbox for added motor efficiency, and a step-up gearbox for manual drive efficiency.

Hire market durability

New hardwearing monocoque chassis, a new robust drivetrain and fully sealed gearboxes are designed with commercial hire operators in mind.

Environmentally responsible

No emissions, no wake and a quiet ride. End of battery life recycling option introduced.

Handles chop and swell

Rolling swell, breaking waves and choppy conditions. The SL3 'slices' through tougher conditions than SUPs, kayaks, and most personal watercraft.

Improved swell riding capability

Adding to the throttle and additional motor power all SL3's come standard with free spinning propellers. A thrilling experience for advanced riders.

Fun fitness on the water

Introduction of 3 low additional electric assistance levels for more control of your workout.



Hydrofoiler *SL3* model variants

Chart new ride experiences along ocean coastlines, train along waterways, or cruise together lakeside with friends and family. If you can ride a bike and swim, you can ride a Hydrofoiler.

Hydrofoiler SL3

Entry level - all riders

Combines the lightweight battery and the FC2 foil.

Lightweight and easy to mount.



Contains

- Orca White Chassis
- Lightweight Hydropack 600 battery
- 'Learner' Fixed Chord 2.0 (FC2) Rear Foil

Hydrofoiler SL3+

Mid-range - bestseller

Combines the long range battery and the FC2 foil.

Ideal for commercial operators and long range riding



Contains

- Orca White Chassis
- Long range Hydropack 1000 battery
- 'Learner' Fixed Chord 2.0 (FC2) Rear Foil

Hydrofoiler SL3 Pro

Top of the line

Long range battery and both the FC2 and HE2 carbon foil. The carbon HE2 foil offers better handling, higher top end speed and weight reduction.



Contains

- SL3 Pro Sharkskin Chassis
- Hydropack 1000 battery
- 'Pro' High Efficiency 2.0 (HE2) Rear Foil
- 'Learner' Fixed Chord 2.0 (FC2) Rear Foil

Can I ride?

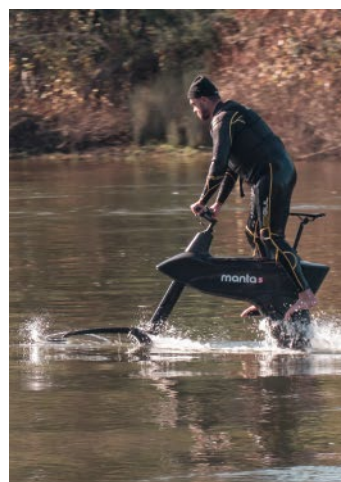
The SL3 is the easiest foiling product on the market. Additional points of contact between the bike and rider, combined with a large stable rear foil provides maximum stability while foiling.

One Hydrofoiler fits a family of different sized riders and physical abilities.

How you ride is up to you.



Suitable for 100kg (220 pounds) and under



If you can ride a bike and swim, you can ride a Hydrofoiler.

Game changing ease of use

We've built in a range of newly patented easy launch tech that means new riders can now become confident riders in a matter of minutes, not hours. The tables below illustrate the average learning curve from a self selected group of 40 first time test riders.

Average launch Learning Time



Easy Launch Technology



Easy mount chassis

Composite monocoque chassis with new floatation and improved mounting ergonomics, combined with the FC2 foil keeps the bike floating upright when stationary.



Pitch perfect tiller

Drastically reduces the chance of stalling mid launch. The new tiller automatically locks at the perfect angle for take off, and automatically releases once up and foiling.



Increased motor thrust & throttle only launch

Our easiest launch ever. Launch and coast without the need to pedal. With a single finger on the throttle, you're in the water and good to go.

A throttle that thrills

A finger on the trigger is all it takes to launch, accelerate and maintain flight at top speeds.

A whole new thrilling way to experience foil biking.

Control at your fingertips

Main Display

Displays live throttle level, pedal assist level, rider power, cadence, battery level, and warnings

Battery level

20% increments, flashes when low

Power button

Short press for off, long press for on

Pedal assistance level

10 levels of assistance:
10 = Full assistance
1 = Minimum assistance

Rocker buttons

Change electric assist level.
Hold down to change display screen mode

Info characters

- Motor active
- Bluetooth connected
- Temperature warning
- Error warning

Motor Activate button

Press & hold to engage motor, short press to deactivate

Throttle lever

Ergonomic positioning, more precision and control

Industry leading safety features

The SL3 is tougher and more reliable in the hardest of marine environments. A whole new level of confidence on the water.



Hydropack batteries

Dual waterproof layers of protection with a transparent outer housing (pictured).

Ride display

Track vital ride metrics like battery life

Propeller shroud

An added layer of protection around the propeller

Tilt sensors

Instantly cuts power to the propeller as soon as a fall is detected.

Easy Ride Technology

Easy to mount and incredibly stable once up and foiling

Modular design: easy transport

New toolless quick connection points for easy assembly.
More modular for compact transport and handling.



■ In-vehicle

Fits in any vehicle with the seats down or in the boot space of larger SUV vehicles.

■ Shipping

Breaking down into five smaller assemblies the accessibility to standard freight carriers is now possible, increasing the options for speedy delivery.

■ To the water

Carry the modules by hand and assemble waterside using toolless quick connection points.

■ Storage

Reduced storage requirements. Suitable for yachts and other vessels where space saving is crucial.

BEST OF THE BEST

Designed in New Zealand

Manta5's product development team are headquartered in New Zealand. A country known for its leading marine industry, boat builders and hydrofoil specialists.

Backed by



NEW ZEALAND
TRADE & ENTERPRISE
Te Taurapa Tūhono



SL3 technical features

Please note, variability in the manufacturing process and suppliers may result in small specs changes.



■ Ride Duration

Maximum ride times are achieved by using minimal electric assistance. Indicative maximum ride times can vary by rider weight, conditions and ability.



■ Speed

Speeds vary based on ride conditions, rider weight & ability

Coming soon: Speed foil & propeller targeting significant increase to top end speed

Top-end speed: 20 kph | 12 mph

Cruising speed: 11 kph | 7 mph

Minimum speed: 6 kph | 4 mph

■ Battery charge time

Hydropack 1000 Battery: 5 hours

Hydropack 600 Battery: 3 hours

Coming soon: Fast charger

■ Parts weight

Chassis: 10.1 kg | 22 lbs

Drive Train: 13.9 kg | 30 lbs

FC2 Rear foil: 5.8 kg | 12.5 lbs

HE2 Carbon rear foil: 2.9 | 6 lbs

Hydropack 1000 Battery: 8.6 kg | 19 lbs

Hydropack 600 Battery: 7.1 kg | 15.5 lbs

Tiller and front foil: 1.9 kg | 4 lbs

Added modularity to the SL3 has reduced the overall carry weight with the heaviest module being 13.9kg (30pounds)

■ Assembled Dimensions

1.4m high x 2m wide x 2.2m long
(4.5 ft high, 6.5 ft wide, 7.2 ft long)

■ Handles chop and swell

Rolling swell, breaking waves and chopping conditions. The SL3 'slices' through tougher conditions than conventional SUPs, kayaks and most personal watercraft.

■ Simplified repair & maintenance

Hose wash down after salt water riding. No high wear drive components like on most bicycles.

Access to replace modules requires less tools.

Further modularity built in to sub-assemblies for affordable repair and minimal waste – when a fault occurs the replacement is of the affected module, not the whole assembly.

■ Hire market durability

New hardwearing monocoque chassis, a new robust drivetrain and fully sealed gearboxes are designed with commercial hire operators in mind.

Mechanical specs



Chassis

Composite monocoque frame with integrated buoyancy
Tool-less quick connection to drive train

Drivetrain

Sealed drive unit: IP67 rated
Custom planetary gearbox
Driveshaft: aluminium
Propeller shaft: stainless steel
Propeller: carbon fibre reinforced nylon

Hydrofoils

Rear Foil: HE2 Carbon



Super lightweight and high strength.

Connection: Custom Tapered Shoe
Aspect ratio: High (10).
Wingspan: 6'6" (2 m)

Rear Foil: FC2 Fixed Chord



Built for learners. Durable, low-cost entry option for new riders and hire operators.

Connection: Custom Tapered Shoe
Aspect ratio: High (10).
Wingspan: 6'6" (2 m)



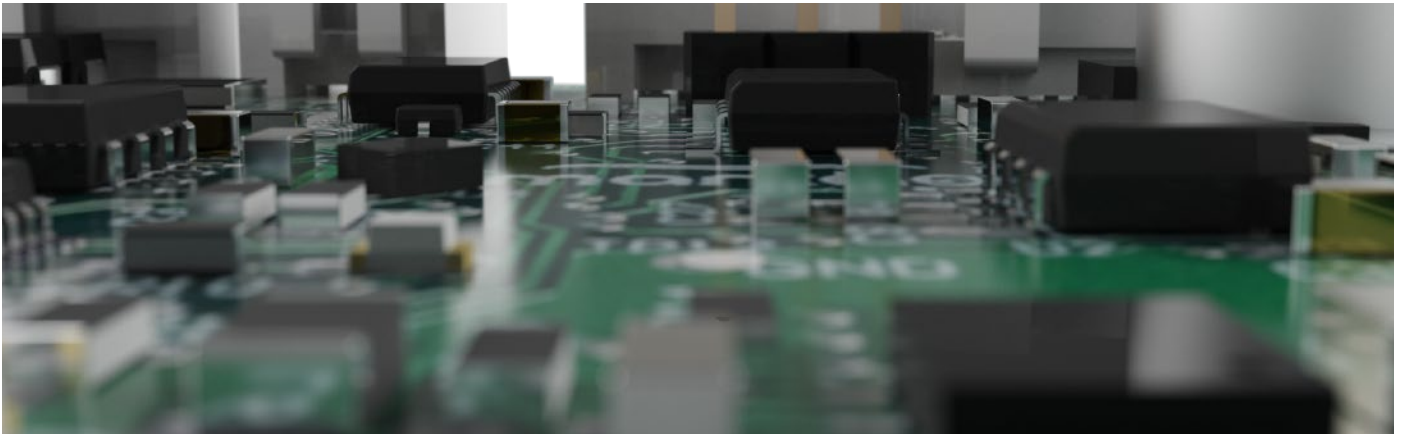
Front Foil: HE2 Carbon

Super lightweight and high strength.

Wingspan: 3'11" (1.2 m)

COMING SOON
SPEED FOIL RANGE

Electronic specs



Bluetooth Ride Controller

Firmware updates via Bluetooth PC application
 Integrated LCD display: Live battery level, electric assist level, throttle position, system warnings
 Increase/decrease electrical pedal assist (10 assist power levels)
 Torque and cadence controlled motor power
 Throttle override
 Two Ride settings: Pedal assist with optional throttle override (default), Boost (full throttle, max speed)

Hydropack Batteries

Dual layer marine grade housing. Clear outer layer for easy inspection. IP67 rated. Integrated Battery Management System with constant 'pulse' monitoring system.

Chemistry: Lithium-ion

Voltage: 52V (Nominal)

Hydropack 1000: 1000 Wh

Hydropack 600: 600 Wh

Peak Discharge: 3000W

Charger: 52V 110/240V AC input

E-System

Motor: Custom in-line motor, sealed to IP67
Power: 2500 watts
Control: Wired Manta5 Ride Controller

Gearbox

Custom planetary gearbox with torque, speed and temperature control, with the ability to assist pedal power or operate individually.

Sustainability



Kaitiakitanga - Guardianship & Protection

In New Zealand there is a very deep connection to the environment. 'Kaitiakitanga', which translates to guardianship and protection. This runs deep within the New Zealand culture. We are not above nature – we are continually innovating and developing new technologies that have the potential to create a future of quiet, clean ocean enjoyment and water transport.

Kaitiakitanga, not only is a key driver and a product development road marker for the innovation at Manta5, its values translate into how our business ethically operates.

We're very proud to be part of the growing number of companies driving for change in our coast lines. The shift to more environmentally conscious product consumption is happening now. Everyday we're seeing increasing pressure on combustion engines in sensitive waters. Electric foiling is the future of water sports and leisure craft with the SL3 being at the forefront of this.

Considered Product Development

No wake: No washout of underwater habitat. No emissions, petrol fumes and slicks are no longer found in our waterways. No noise, the revving of personal watercraft engines is replaced by a whisper.

Built to Last

The Hydrofoiler SL3 features a drive train that's designed for life, an overall a 5X life increase on the first gen XE-1 model. They are built to

last and we are continually working on improving everything about them.

Responsible Battery Disposal

Manta5 is committed to the collection and responsible disposal of used batteries. The regulations vary per country. An overview of the national collection schemes in the EU and US can be found [Manta5.com](https://manta5.com).

Take only what you need

Electric power assistance blended with human power delivers a highly efficient and environmentally friendly mode of transport on the water.

The evolution of a foil cyclist

Calm lakes, coastlines and waterways is where we all start, the shore huggers. Then the addiction kicks in. The locations get more remote, the distances get longer, the waves get bigger. and the rivers get faster. There is a depth of riding to experience and firsts everywhere you look.

Pioneering ride stories

1st Strait Breaker

26km across the Notorious Cook Strait (New Zealand)



1st Race

The inaugural sprint race in Alicante, Spain organised by Salty Cycling Club

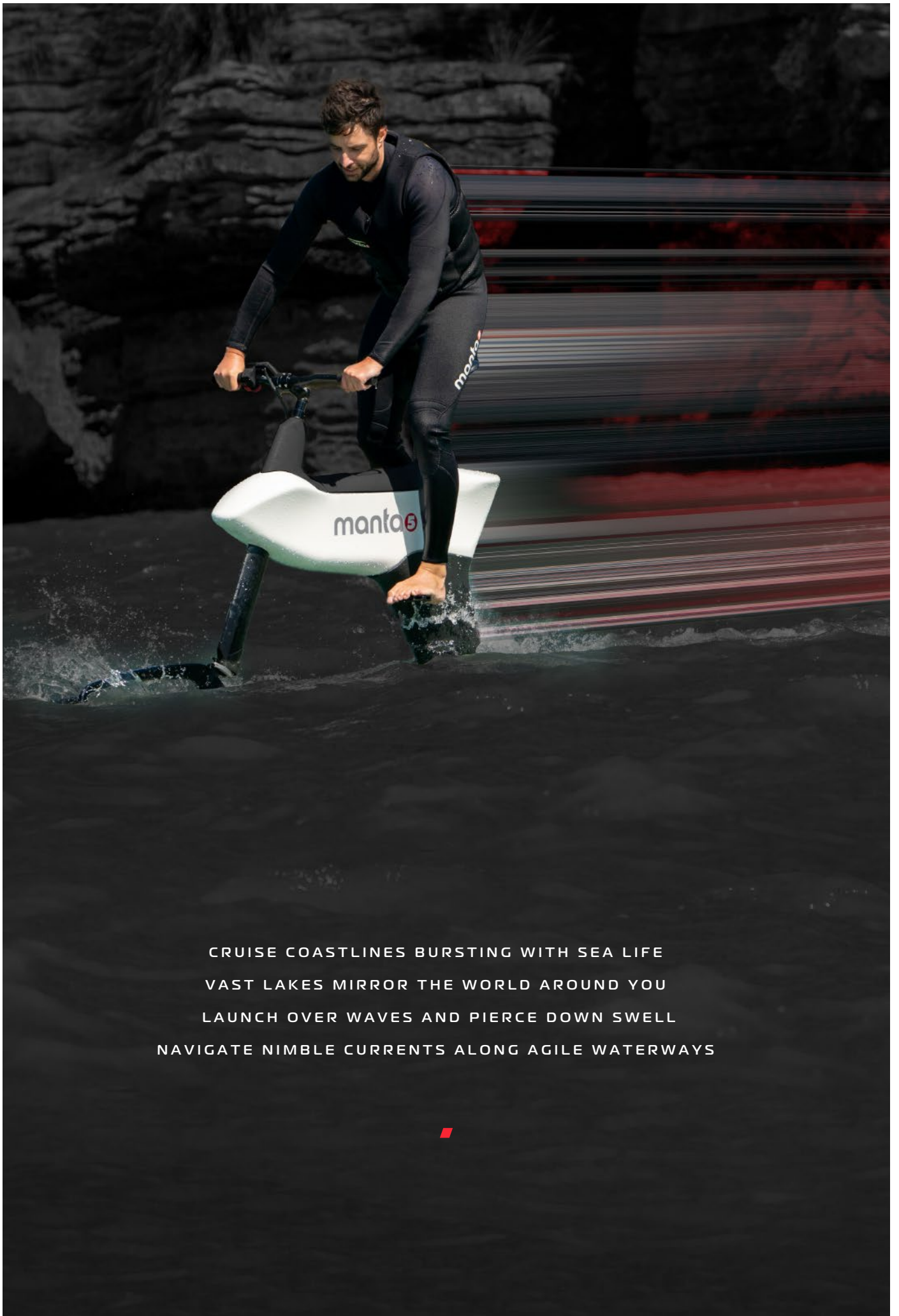


1st Wave rider

A new entrant to the line up

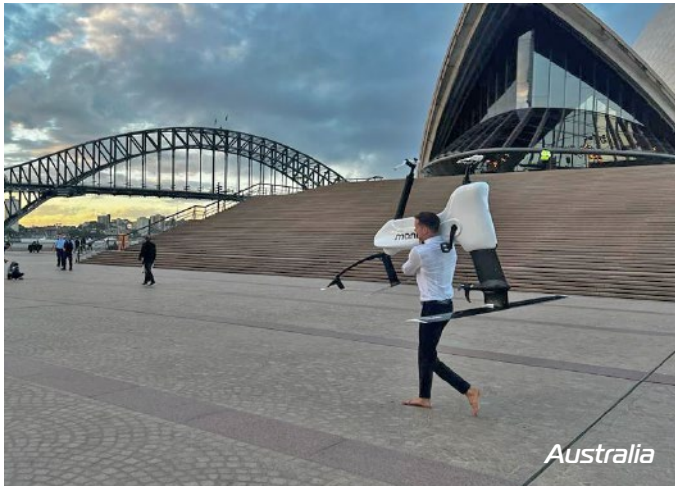


Got an idea for an epic ride? Get in touch via hello@manta5.com



CRUISE COASTLINES BURSTING WITH SEA LIFE
VAST LAKES MIRROR THE WORLD AROUND YOU
LAUNCH OVER WAVES AND PIERCE DOWN SWELL
NAVIGATE NIMBLE CURRENTS ALONG AGILE WATERWAYS





Australia



Germany



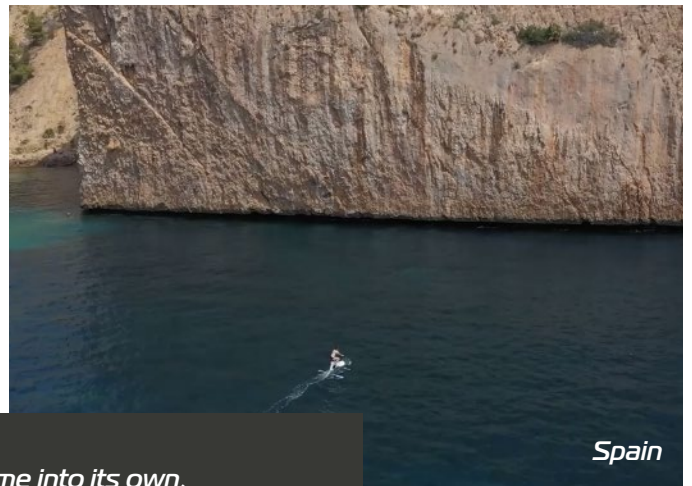
United States



Italy



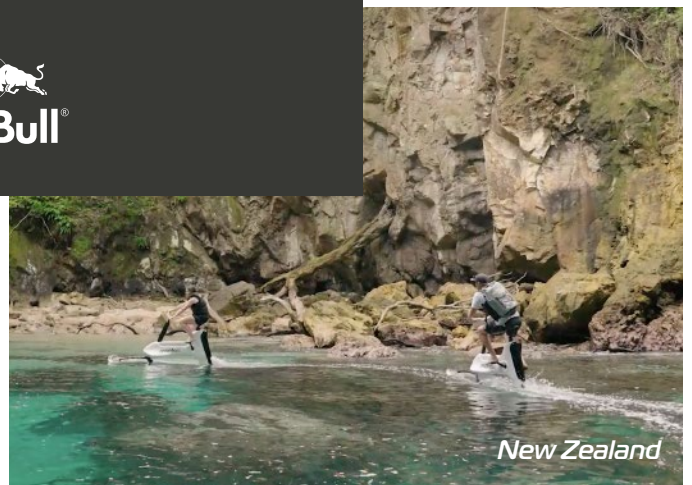
Norway



Spain



Portugal



New Zealand

"The bike will come into its own,
marking the birth of a new sport"



Passionate and growing foil cycling community

Small, local clubs are out there setting the standards of the future sport.



Founding story



Inventing the Hydrofoil Bike

Manta5 exists because of cycling enthusiast and water lover Guy Howard-Willis. A tinkerer and entrepreneur at heart, Guy's passion for the outdoors lead him to co-found New Zealand's largest multi-sport retailer Torepdo7. After a successful sale of Torpedo7 Guy leapt right into his next venture – to create new category of cycling.

The hydrofoiling bike concept literally came to Guy's mind in a dream - a dream where he pushed off from his holiday home jetty and rode a bicycle-type product that brought him the same feeling and freedom as his road bike. He cruised out into the bay before being greeted by a pod of dolphins which swam alongside him as he rode.

He woke up but the dream stuck with him and he started the Manta5 journey. The original design brief presented no easy feat. Just as a high-performance bicycle, Guy envisioned a concept that was lightweight, fast, agile, easy to transport and assemble. On top of this, there was no settling for any bulky buoyancy or hulls.

A Revolution

It took the best part of 5 years to test various concepts and designs. In the end it was only hydrofoil technology that offered the intuitive experience of cycling on the water.

Manta5's profile exploded internationally when the then concept 'Proto6' won Gold in the Concept Category at the local New Zealand Design Awards. The video submission was picked up from media companies the world over, including Redbull, Forbes, New Atlas and the BBC. With the concept racking 400 million views on social media it was time to commercialise.

In 2020, amid the height of the Covid pandemic Manta5 delivered the XE1 to the USA and Europe. The hook has set and the foundations of a new sport are emerging.

A destination employer with an exciting product roadmap

At the bottom of the world, surrounded by epic coastlines, world renown boat builders and the home of the America's Cup, Manta5 is lucky to have passionate individuals join us from across the country and beyond.

What started as a tinkerer building bizarre looking creations in a garage has become a specialist product development lab with industry leading fluid dynamic design tools, in house mechanical and electrical development teams, capable of extracting more and more performance from our products.

70% of the worlds surface is now open for cycling

Today, Manta5 owes its success to Guy's obsessive vision to replicate the genuine cycling experience on water. Consider the diversification and unique experiences of bicycles on land. The tipping point towards a sport in the human power foil bikes, and a motorsport via the electric foil bikes are years away.

As often happens over a long journey, the vision to replicate and the team's pursuit has taken us somewhere unexpected. Manta5 has surpassed the goal of replicating the authentic cycling experience on water and now, foil biking should be considered the finest cycling experience - elevated by water.

"IT SEEMS TO DEFY SIMPLE CATEGORIZATION.
CONSIDER THE AMOUNT OF NEW RIDEABLE
TERRAIN IT WILL OPEN"

ANDREW MAGNESS, GEAR JUNKIE



"TRULY A NEW EXPERIENCE AND A NEW WAY
TO BE OUT ON THE WATER."

JUSTIN JAFFE, CNET



"IT'S SIMULTANEOUSLY FAMILIAR AND
FOREIGN, WHICH MAKES FOR AN ABSOLUTELY
EXHILARATING RIDE THAT STICKS WITH YOU
LONG AFTER YOU'RE DONE."

DREW PRINDLE, DIGITAL TRENDS

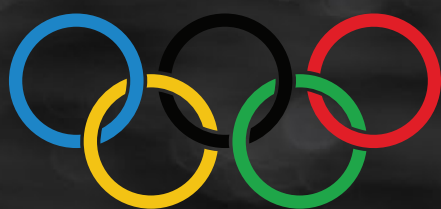


OUR MISSION

"I WANT THESE BIKES TO GO WELL
BEYOND JUST BEING A LEISURE
PRODUCT - I WANT IT TO BE A
SPORTS PRODUCT.

IF YOU CAN RACE IT THEN ITS
COMPETITIVE, AND IF ITS
COMPETITIVE THEN ONE DAY IT
COULD BE AN OLYMPIC SPORT"

GUY HOWARD-WILLIS,
FOUNDER & DIRECTOR OF MANTAS



How to order

Manta5 sells its products via a growing dealer network. Visit manta5.com to find a retailer near you.

If no retailer is in your country/state/region contact the nearest **Promoted Dealer**. These dealers have proven ability to ship products and provide after sales support across borders.



FAQ's

Where can I purchase a Hydrofoiler?

Manta5 sells its products via a growing dealer network. Visit our Authorised Reseller page to find a retailer near you. If no retailer is in your country/state/region contact the nearest Promoted Dealer. These dealers have proven ability to ship products and provide after sales support across borders.

How much does a Hydrofoiler cost?

Retail price may differ region to region. Prices are available on dealer websites or by application. Transportation and preparation fees may vary based on selection.

Can the bikes handle chop and swell?

Yes, we're yet to take them down jaws but wave riding, ocean chop, wind chop, swell are all ok.

What happens when I stop moving?

The bike floats upright in the water when stationary. When you stop pedalling, the bike will lower until the chassis is floating on the surface. Riders can stay on the saddle semi-submerged when stationary.

What is the minimum water depth required to foil and submerged launch the Hydrofoiler?

A minimum depth of 3ft (1m) to ride the bike in, is recommended. However, to perform the submerged launch to resurface this would require a minimum water depth of 7ft (2m).

Do I need a licence or registration to ride?

Regulations vary from Region to Region and Country to Country. Your local reseller may provide information as it comes to hand from various authorities, however it is the responsibility of riders to be aware of and comply with regulations in their specific location. If in doubt, please check with your local harbour authority.

What happens if I run out of battery?

When the battery reaches critical levels the battery level on the display will start flashing. If after significant warning the rider

continues to ride until the battery is completely drained, the motor will stop working, and the rider will have to self-rescue, either by manually pedalling (in submerged state), or swimming the bike back to shore.

How does the battery handle the heat/cold?

The total ride time (battery life) may differ when operating in extreme ambient temperatures.

For example, all lithium batteries achieve optimum service life if used at 68°F (20°C) or slightly below. If, for example, a battery operates at 86°F (30°C) instead of a more moderate lower room temperature, the cycle life is reduced by ~20 percent.

Can I use it in salt water?

Hydrofoilers are designed for use in salt water, but like most saltwater products should be washed down with fresh water after use.

If I damage my chassis, is it covered under warranty? Where can it be repaired?

The Hydrofoiler chassis can be repaired by your local surfboard or vehicle panel repair specialist. Manta5 Limited Warranty covers damage caused by defects in the materials or workmanship of the product only.

What is the learning curve like?

The SL3 is generally considered to be the easiest foiling product on the market. The longer rear wing provides a stable ride when up and foiling and the additional points of contact between the bike and rider assist when launching. If you can ride a bike and swim, you can ride a Hydrofoiler.

What functions are available on the Ride Controller?

- Firmware updates via Bluetooth
- Integrated LCD display: Live Battery Level, Assist Level, Throttle position, System Warnings, Rider Power Display, Rider Cadence Display
- Increase/decrease electrical pedal assist (10 Assist power levels)

FAQ's

- Torque and cadence-controlled motor power
- Throttle Override
- Different Ride modes: Pedal Assist with optional throttle override (Default), Boost (Full throttle, Max Speed)

How do you transport the Hydrofoiler?

The Hydrofoiler SL3 features quick connection parts that breaks the bike into 5 sub-assemblies.

- **In-vehicle**
Fit in any vehicle with the seats down and fits in the boot space of larger SUVs.
- **Transport to the water**
Carry the modules by hand and assemble waterside using toolless quick connection points.
- **Reduced storage requirements**
Good for yachts and other vessels where space saving is crucial.

How do I re-charge my Hydropack?

The Hydropack charges using a special charger that plugs into a standard household wall socket, either 220-240V or 110-120V.

Can I take my Hydrofoiler and it's Hydropack battery on an aeroplane?

Unfortunately, electric vehicle batteries are not permitted on passenger aircraft. Depending on the route, it may be possible to ship the Hydropack separately on a dedicated cargo plane, via road or sea transport.

How long does a battery charge last?

It depends on how you ride. The Hydropack 1000, and Hydropack 600 offer maximum ride times in excess of 4.5 and 2.7 hours respectively when riding on low levels of electric assist.

Global warranty

This Manta5 Limited Warranty ("Warranty") is a voluntary manufacturer's warranty by Manta5 LP, a New Zealand limited partnership (limited partnership number 2592602), acting via its general partner Bright Spark Innovations GP Limited, a New Zealand company (company number 4749042) ("Manta5"). This Warranty applies to the products listed below. Your legal rights as a purchaser may vary by country or jurisdiction. This Warranty does not affect these rights.

Before using the product, please read all Manta5's "Product Materials" including, without limitation, user manuals, safety guidelines, specifications, training videos, social media posts, and service communications from Manta5 or its authorised representatives. Manta5 product warranty registration must be completed upon purchase through the required monthly warranty reporting.

Manta5 warrants for the relevant coverage periods that the Hydrofoiler will be free from defects in material and workmanship under normal use in accordance with Manta5's Product Materials.

What is covered?

Warranty periods are from date of delivery and differ between products as detailed below. The following products are covered under warranty:

- 2-Year Warranty on Manta5 Hydrofoiler:
 - Chassis
 - Foils (front and rear)
 - Motors
 - Gearboxes
- Manta5 Hydrofoiler batteries (including battery): 1-year warranty or up to 250 charge cycles, whichever occurs first.

Proof of original retail purchase must be presented when making a claim under this warranty. Note that where the product is no longer owned by the original owner, the remaining warranty period (if any) is transferable to a second owner provided proof of original retail purchase is presented when making a claim.

What is not covered?

This Warranty is void under the following circumstances:

- Improper use of the Hydrofoiler, including excessive, or other abnormal use.
- Crash, physical impact, collisions or fire resulting from non-manufacturing processes, or use in unsafe locations or unsafe conditions.
- By damage or defects caused by transport, loading, unloading, dropping, out of water handling, or inappropriate storage including, without limitation, damage or defects caused by exposure to temperatures stated in the Product materials.
- Modification of the product without Manta5 approval.
- Improper maintenance or servicing (including any failure to comply with the Product Materials when maintaining or servicing the product), improper alteration, improper assembly and/or use of parts, accessories or software that are not compatible with the product.
- Wear and tear. Even when maintained correctly, some parts will eventually wear out and require replacement (such as seals, oil, bearings etc.). Similarly, the paint and bike graphics may be scratched as a result of normal use. Parts that are damaged due to wear and tear are not covered under this warranty.
- Commercial use of any kind.
- If the serial number has been removed or defaced.





Colour matching of replacement parts is not included in this Warranty.

This warranty does not cover any software programs, whether provided with the Hydrofoiler or installed subsequently, or any loss of the Customer's data.







MANTA5.COM

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