

manta5

www.manta5.com

CYCLING'S NEW FRONTIER.



0800 114 235

hello@manta5.com



A WORLD FIRST

**DESIGNED AND DEVELOPED
IN NEW ZEALAND.**

Based in New Zealand, with world leaders in hydrofoil technology and the country's top cycling athletes right on our doorstep, Manta5 is uniquely positioned to test our Hydrofoilers in the world's purest riding locations.

7+ years, 8 major prototypes, dozens of specialist consultants, hundreds of design iterations, and thousands of tests. The result, a product that delivers one of the most unique experiences on water to date.

PLACE ORDER REQUEST



“WE SET OUT TO REPLICATE THE CYCLING EXPERIENCE ON WATER”

Guy Howard-Willis, Founder.

Guy Howard-Willis has always had a passion for cycling and watersports. That passion drove him and his son Luke to co-found Torpedo7 - a business that eventually grew to become New Zealand's largest outdoor and adventure sports retailer.

Much like a boat can be likened to a car, a jet ski to a motorbike, the intuitive cycling experience had yet to be achieved through existing pontoon style bikes. The distinct lack of options had Guy wondering whether or not the same hydrofoil technology that lifts America's Cup yachts out of the water could be applied to replicate the intuitive cycling experience on a whole new 'water-terrain'.

In early 2011 Guy spent months mapping out different hydrofoil water bike concepts and the idea sat with him. It was only in 2013 when Guy sold Torpedo7 he decided to turn his dream into a reality.

PLACE ORDER REQUEST



Guy Howard-Willis, Founder.

HYDROFOILER™ XE-1

DEVELOPMENT JOURNEY

While the concept of a hydrofoiling bike appeared simple on paper, it's taken some of the best engineering minds and years of commitment to make Guy's vision a reality.

The goal was always to stay true to an authentic cycling experience, but when it comes to the physics, the Hydrofoiler is more an aeroplane than a bike. Just like designing a plane, the team had to understand and design for the subtle relationship between rider 'payload' weight vs lift from the hydrofoil 'wings'. Couple this with understanding the required thrust from the propeller, the rider, and the motor to overcome the overall drag - when stationary in deep water and at high speed - was no easy feat. Years were spent understanding and optimizing the relationships between these forces.

Upon achieving a proof of concept the team's focus turned to creating a high-quality, manufacturable product that stayed true to Guy's vision. To keep it lightweight, safe, modular and serviceable. Throughout the design for manufacture stage, a self-selected group of thirty potential customers nicknamed the 'Testing Academy', played a fundamental role in refining requirements from the desired level of mastery, the ride experience, key riding techniques, transport, right through to recharging and storage.

Eight years later the Hydrofoiler XE-1 is now making its mark in oceans, lakes and waterways around the world.

WATERPROOF EBIKE

The world's first waterproof eBike, with a custom-built, highly efficient battery.



CARBON FIBER HYDROFOILS

Fully-custom, patent-pending profile generates maximum lift during the submerged launch and allows for a range of rider weights.



TILLER SECTION

Refined over dozens of iterations to remain in a neutral position while submerged launching, as well as react quickly to cut through chop and ride over swells.



PROPELLER

Custom 4-bladed injection moulded propeller that generates significant thrust at low speed whilst minimizing drag at top speed.





"MORE AN AEROPLANE THAN A BIKE"

Guy Howard-Willis, Founder

PLACE ORDER REQUEST

INTRODUCING THE
HYDROFOILER™ XE-1

USING THE SAME TECHNOLOGY AS AMERICA'S CUP SAILBOATS
THE HYDROFOILER XE-1 OPENS UP A WHOLE NEW CYCLING FRONTIER.

Suitable for a wide range of fitness levels, riders can explore ocean coastlines, train along waterways, or cruise lakeside with friends and family.

Fast and maneuverable, get ready to experience the thrill of cycling on the open water - no roads, no traffic.



- Variable pedal assist can be dialed up or down to fit your needs.
- Top speed of up to 21 kph / 13 mph / 11 kn (similar to Olympic single scull rowers).
- Modular design for quick assembly and transport to and from the water.

MODEL SPECIFICATIONS

HYDROFOILER™ XE-1

CHASSIS AND GEARS

- Aircraft grade TIG welded 6061-T6 aluminium frame
- Hybrid drivetrain with industry standard components for easy replacement
- Buoyancy modules designed to streamline the Hydrofoiler both above and below water
- Easy maintenance crank-set, gearbox and propeller/shaft sub-assembly

ELECTRIC MOTOR

- IPX8 rated electric motor
- 460 watts of pedal assist power
- Specially designed cooling fins, integrated RPM and double pedal torque sensors to ensure optimal motor temperature
- 7 electrical assist levels

CARBON FIBER HYDROFOILS

- Foil tip design minimizes drag and extends effective wingspan
- Rear wingspan measures 6' 6" (2m). Front wing, 3'11" (1.2m). General purpose foils. Suitable for lakes, rivers, and ocean

HYDROPACK BATTERY

- Fully submersible IPX8 rated battery housing system.
- 70 cell lithium ion pack
- 36 volts of power capable of supplying 22 amps
- Easy access charging connector with a 4 hour charge time
- Battery ride time 1-4 hours dependant on level of electric assist*
- GARMIN® eBike Remote includes on/off, and electrical assist level selection (up and down)

*Estimated battery run time may vary depending on the weight of the rider, weather conditions, and level of assist.

"FRONT TILLER" - NOSE OF BIKE

- Front tiller pivots automatically to adjust ride height to suit different water conditions, ensuring optimal planing levels, and rider efficiency.

Weighing a total of 67 lbs/30.5 kg* (including motor and battery) the Hydrofoiler XE-1 is as light weight as industry standard eBikes.

**Total bike weight may vary based on production componentry*



GARMIN CONNECTIVITY

YOUR RIDE, CONNECTED

All Manta5 Hydrofoiler XE-1's come standard with the GARMIN® eBike Remote. Rugged, compact and lightweight and effectively cycle between the 7 levels of motor assistance. With multiple compatible devices (30+) make use of Manta5's free Datafields on the [Connect IQ Store](#).

For more information please contact hello@manta5.com.

RIDERS CAN TRACK

- Distance
- Speed
- Ride time
- Heart Rate
- Battery charge level
- Electric assist level
- * More features to come



GARMIN DATA FIELDS

Premium multisport GPS watch with Elevate™ wrist heart rate technology.

*actual watch face is subject to change

*All XE-1 shipped with Garmin eBike Remote only. Garmin watch not included.



EBIKE REMOTE

Rugged, compact and lightweight remote control. It's never been easier to change the performance level of your bike.



DYNAMIC ELECTRIC ASSIST

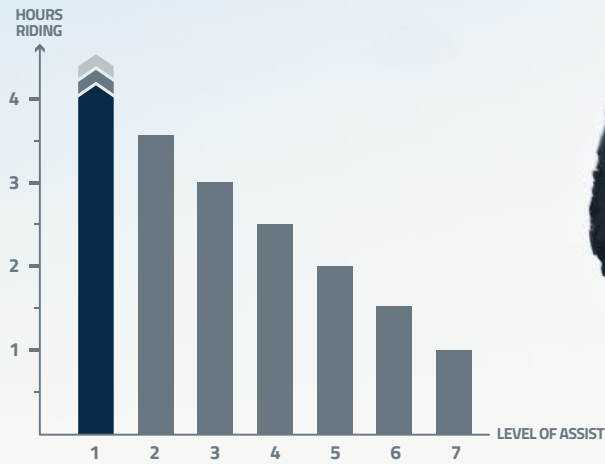
4 HOUR RIDE TIME

The Hydrofoiler XE-1 has seven levels of electric assistance that can be changed as you ride.

Dial the electric assistance down and put in more of your own power to increase the duration of your ride.

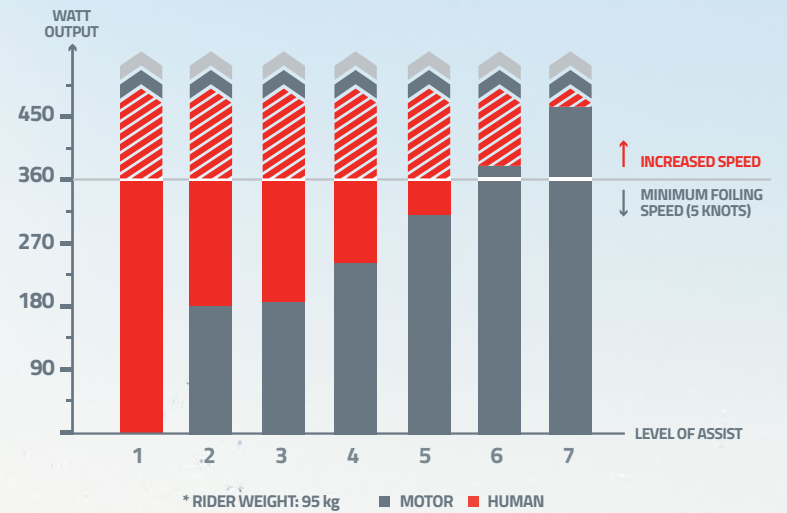
A heavy rider can get ~4 hours of ride time on low assistance. The harder you work, the further you can go.

BATTERY RIDE TIME



* Dependant on weather conditions and rider weight/ watt output

RIDER WATT OUTPUT*



HYDROFOILER™ XE-1

PRODUCT APPLICATION



COAST

The front tiller section lets you cut through chop and ride over swells.



LAKES

Waterproof eBike motor gives you quiet propulsion when you need it.



WATERWAYS

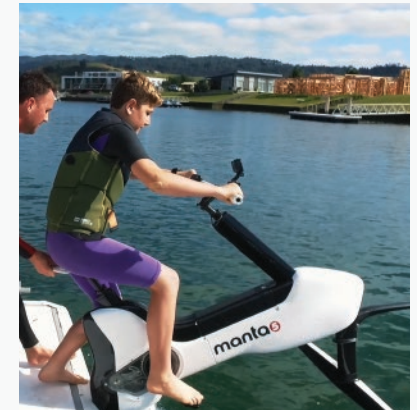
Hydrofoiling drastically reduces drag which allows you to easily cut through current.

MASTER THE RIDE

ONE BIKE, DESIGNED FOR ALL

Mastering the Hydrofoiler is like learning to ride a bike all over again. It might take a few attempts, but once you get the hang of it, it's the most fun you can have on water. Hone your balance, drift into turns and carve your way around the coast.

Suitable for a wide range of fitness levels and body types. If you can ride a bike and swim, you can ride the Hydrofoiler.



MASTER THE RIDE

EASY TRANSPORT, FAST ASSEMBLY

The Hydrofoiler is the most mobile personal watercraft in the market today.

Weighing a total of 67 pounds (30.5 kg) fully assembled, its modular design allows for easy in-car or towbar rack transportation before and after your ride.





mantaos

BETA 01

Proudly sponsored by
HYUNDAI
NEW

MASTER THE RIDE

LAUNCH ANYWHERE

No two bodies of water are the same.

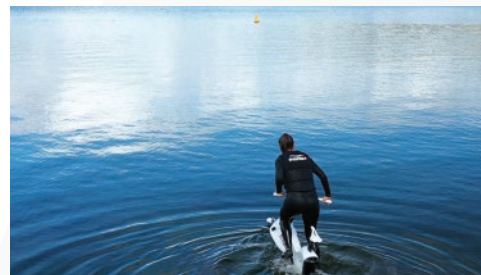
Whether you want to launch from the beach, boat, jetty or deep water.

Enjoy learning the key launching techniques needed to get up on the foil in various locations.

PLATFORM LAUNCH



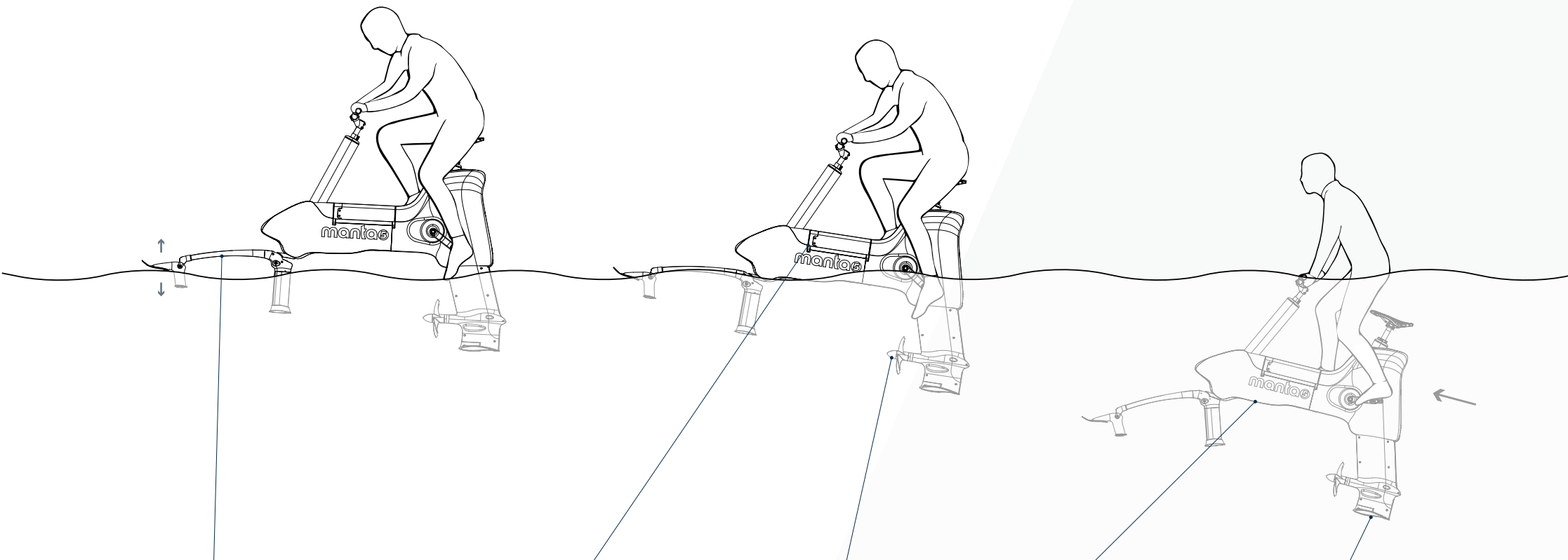
BEACH LAUNCH



MASTER THE RIDE

SUBMERGED LAUNCH

One of the Hydrofoiler's unique features is the ability relaunch after falling in deep water. The first of its kind for any hydrofoiling watercraft. The submerged launch gives you the confidence to go further, for longer. Master this technique and unlock the full riding experience.



FRONT TILLER ASSEMBLY

Self levelling, designed to automatically handle waves, ocean swell and chop without any rider input

MOTOR AND BATTERY

Provides variable pedal assist to generate thrust and higher top speeds

PROPELLER

Maximum thrust at low speed, whilst minimising drag at top speed

BUOYANCY

Generates static lift

REAR FOIL

Designed for dynamic lift at both low and high speeds

GET YOURS

PILOT AND MASS PRODUCTION DELIVERY SUCCESS

Manta5 has produced and delivered a limited-unit pilot production run which landed into the hands of New Zealand customers in December 2019. This pilot production offered the team the unique opportunity to closely market test the Hydrofoiler XE-1 to guarantee a dynamic ride experience before we scaled for mass production.

Now, with the ability to scale at pace, Manta5 is delivering the first international orders to customers starting Summer 2020. Delivering into over 24 countries, cycling's new frontier has arrived.

The bike has had a great reception in New Zealand. Riders are carving over ocean chop, cruising along waterways, or escaping to a lake where there's no traffic or roads in sight.

The community of riders is forming in New Zealand. In three years time, Manta5 sees Hydrofoiling as its own sport and fitness category. Manta5 company Founder, Guy Howard-Willis, already has his sights on the Olympics.

"It's very exciting. As soon as I heard about this world-first water e-bike I placed my order. The whole aviation element, with its foils, totally fascinates me. It's a new way for me to exercise on the water and have fun too."

Early adopter, Rocco
(Lake Tarawera, Rotorua, New Zealand)

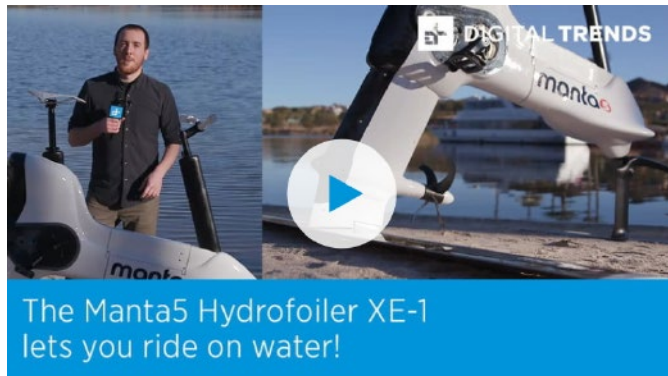
PLACE ORDER REQUEST



EXPERIENCE

RIDING TESTIMONIALS

Manta5 invited media to try out the Hydrofoiler XE-1 at CES 2020 in Las Vegas.



"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

[WATCH THE VIDEO](#)



"Truly a new experience and a new way to be out on the water."

Justin Jaffe, CNET

[WATCH THE VIDEO](#)



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FEATURED IN

THE HYPE IS BUILDING AROUND THE WORLD.

2017 BEST DESIGN AWARDS
CONCEPT CATEGORY WINNER



350,000,000+

VIEWS ON FACEBOOK ALONE

40,000+

REGISTRATIONS OF INTEREST FROM
ALL OVER THE WORLD

2,500+

DISTRIBUTOR ENQUIRIES



Mashable



Men'sHealth



design
boom®

TECH
INSIDER

GEARJUNKIE

NEW ATLAS

Forbes

"The bike will come into its own, marking the birth of a new sport and cementing the Hydrofoil bike as a new Kiwi icon."

"Manta5 has created a thrilling world's first"

"The hydrofoils let you cut through the water with ease"

"This one doesn't just dawdle slowly around a pond. It skims over the surface."

"We hope to see it in the Olympics one day"

"One of the best toys and gadgets of 2018"



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