



Stinger
BOARDS®

eFoil Manual

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A Note from the Founder

Steve Legge

Inspired by watching surfers glide through the unrelenting waves of Maui's North Shore and conceived on the turquoise glacial lakes of Whistler, BC, we introduce to you the newest Canadian Watersports Company; Stinger Boards & Foils Inc. The philosophy of Stinger is quite simple, knowing that every day you spend on the water with family and friends is a good day, we wanted to develop quality products that are innovative and exciting. With over 30 years of experience on the water, we took what we knew (and a bunch we didn't) and meticulously tested different shapes, materials and designs to develop our boards, foils, wind-wings & fins. The results are next generation products, made from the highest quality materials, which will challenge your day on the water.

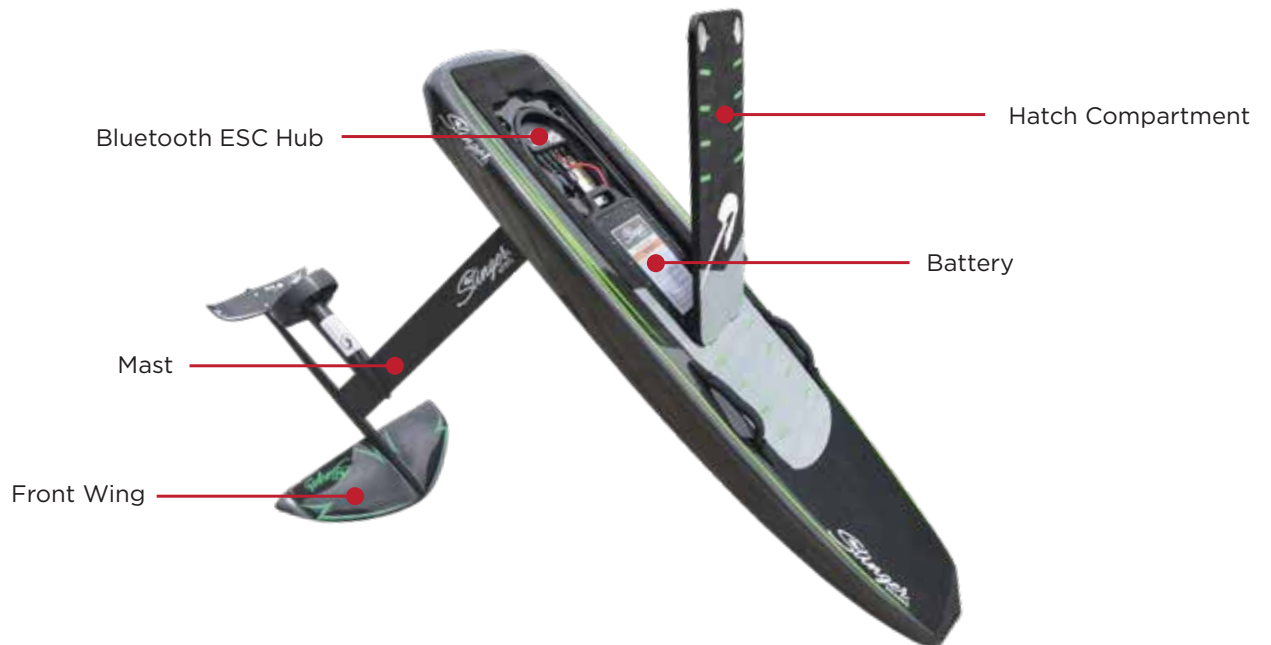
Stinger will change the way you ride!

In 2017, we started with Wakesurf Foil and quickly advanced to offer a full lineup of foils - Wind-Wings, SUPs, WindSurfs and Freestyle Kites. So, no matter your discipline, a Stinger Foil will help you take flight!

All of our Stinger Foils have been designed with full carbon wings and Canadian made aluminum masts, bases, and fuselages. We offer four different mast sizes as well as two Gull-Wing designs that are new to our collection.

Steve Legge, CEO and Founder of Stinger Boards & Foils

The Stinger eFoil



Safety Warnings & Disclaimers



USE OF THIS PRODUCT AND PARTICIPATION IN THE SPORT INVOLVES INHERENT RISKS OF INJURY OR DEATH. BY USING THE PRODUCT, THE USER ACKNOWLEDGES AND ACCEPTS THIS.

The information contained in this User Manual represents the most up-to-date product data available at the time of printing. Stinger Foils is committed to continuous product improvements and advancement of technology and the company reserves the right to change the product, components, specifications, or other aspects of the Stinger board without advance notice.

The most current information can be found on the Stinger Foils website www.stingerfoils.com

General Warnings

⚠ **DANGER**

FAILURE TO COMPLY WITH THESE WARNINGS MAY RESULT IN SERIOUS BODILY INJURY OR DEATH TO YOU OR OTHERS.

- Contact with the product's spinning propeller can cause serious injury or death.
- Keep your body, fingers, and toes away from the propeller.
- Never handle the propeller while the battery is connected to the system. Disconnect the power source before servicing your propeller.
- Do not service your propeller in the water.
- Do not remove the propeller guard unless in strict compliance with the Operator's Manual's instructions that cover servicing the propeller.
- Never operate toward a person in the water.
- Do not attempt to open the waterproof hatch compartment while in the water for any reason.
- The fin or fins can be and/or become sharp and/or dangerous and can cause serious injuries or death to you and/or others.

⚠ **WARNING**

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- Fully read and follow the Operator's Manual before use.
- Always inspect the product prior to use to ensure it is undamaged, that the battery hatch seals tightly, that the controller is in proper working order, and that the product is otherwise fit for use. NEVER use a damaged product.
- Stay under control during use. Do not ride at speeds in excess of your ability. Beginners should use extra caution. Too slow is better than too fast.
- Use only on water.
- Only depress the throttle trigger lever when you are mounted on the product and ready to deliver power to the motor.
- During use, the hydrofoil is submerged up to 3 feet in depth. Do not use in shallow water or near shore, docks, piers, swimmers, or other vessels on the water.
- Use only in areas that are free of debris and/or abundant wildlife.
- Only proficient swimmers should use the product. Their rider must stay close enough to shore to swim back in case the product ceases to function.
- Always wear appropriate safety equipment during operation, including Coast Guard approved flotation devices, a full faced helmet, a padded wetsuit, and a Coast Guard approved impact vest. Avoid loose clothing that could become wrapped in the propeller.
- Check weather forecast before departing dock and heed all weather advisories.
- Never operate while under the influence of drugs or alcohol.
- Reduce speed before attempting sudden or sharp turns to maintain safe speeds for water conditions and environment at all times. Maneuverability at high speeds is limited and sudden turns may cause loss of control.
- Keep proper lookout and safe distance for the conditions at all times to avoid collisions.
- Obey all applicable navigation rules, boating laws, local regulations and orders.
- The product can potentially attract predatory fish. Know your environment and avoid areas where dangerous wildlife exists.
- Do not allow others to operate the craft without making them fully aware of the proper procedures and dangers of the craft.
- NOT for use by children. The product is a powerful water device and should not be operated by anyone under the age of 16.

Warranty Info

Stinger Boards & Foils Inc. (Stinger), “STINGER” warrants that its products will be free of defects in material or workmanship to the original purchaser for a period of one year from date of purchase. If a product is found to be defective by STINGER, in its sole discretion, STINGER’s responsibility shall be limited to credit, repair or replacement of the defective product.

IN NO EVENT SHALL STINGER BE LIABLE FOR SPECIAL, INDIRECT, CONSEQUENTIAL OR INCIDENTAL DAMAGES, WHETHER ARISING UNDER CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR ANY OTHER THEORY OF LIABILITY. Such damages include but are not limited to loss of profits, loss of use of the goods, damage to property, and claims of third parties.

The warranty encompasses STINGER products that were purchased from an authorized Stinger Boards & Foils Inc. Dealer in Canada.

Warranty coverage is not transferable and as such will only apply to the original purchaser of the STINGER product. Proof of purchase must be presented to your Stinger dealer at the time of the warranty claim.

This warranty is subject to the following limitations.

STINGER will warrant all products, with some exceptions, sold by STINGER determined to have defects in material or workmanship, for the time period of one year from the date of purchase.

The warranty applies only to STINGER products purchased from Authorized STINGER Dealers only, and is valid for the original purchaser.

Used and demo products are sold “as is” and do not carry a warranty.

The warranty does not apply to normal wear and tear and damage caused by anything other than defects in material or workmanship. Damage caused by use of the product outside its intended purpose is not covered by warranty.

All warranty coverage is void if any modification, change or alteration has been made to the product, unless authorized in writing from STINGER.

Damage from natural causes, such as hurricanes, tornadoes, floods and storms (“Acts of God”) are not covered under warranty.

All warranty claims must be accompanied by the original purchase receipt, and must clearly identify the dealer, date of purchase and the item.

Repaired or replaced products are covered for the remainder of the original warranty period only.

If the product needs to be returned to STINGER, the customer is responsible for the cost of shipping products, freight prepaid, and insured. STINGER assumes no responsibility for products during shipment from the customer to our warehouse. Shipping charges are nonrefundable.

STINGER will cover return shipping via ground service of repaired or replaced items within Canada. If purchased outside of Canada, shipping and duty if applicable will be at the cost of the customer.

More info on Warranty process can be found at www.stingerfoils.com

Propulsion System Warnings

 **DANGER***Stinger*
BOARDS

CONTACT WITH THE PRODUCT'S SPINNING PROPELLER CAN CAUSE SERIOUS INJURY OR DEATH:

- **Keep your body, fingers, and toes away from the propeller**
- **Never handle the propeller while the battery is connected to the system**
- **Do not service your propeller in the water**
- **Do not remove the propeller guard**
- **Do not have controller turned on while board is out of the water**



- ALWAYS KEEP THE REMOTE OFF WHEN BATTERY IS INSTALLED AND ACTIVE, UNTIL READY TO USE.
- CONTACT WITH THE PRODUCT'S SPINNING PROPELLER WILL CAUSE SERIOUS INJURY OR DEATH.
- KEEP BODY, FINGERS, AND TOES COMPLETELY AWAY FROM THE PROPELLER.
- NEVER HANDLE THE PROPELLER WHILE THE BATTERY IS CONNECTED TO THE EFOIL.
 - Disconnect the power source before servicing the propeller.
 - Do not service the propeller in the water.
- NEVER OPERATE TOWARD A PERSON IN THE WATER!

Ride Safety

• Always inspect the product prior to use to ensure it is undamaged, that the battery hatch seals tightly, that the controller is in proper working order, and that the product is otherwise fit for use.

- NEVER USE A DAMAGED PRODUCT.

Do not allow others to operate the craft without making them fully aware of the proper procedures and risks of the craft.

- NOT FOR USE BY CHILDREN.

This product is a powerful water device and should not be operated by anyone under the age of 16.

Battery Warnings



WARNING

SAFE BATTERY USAGE:

- Battery manufactured by Samsung® for Stinger® Boards and Foils Inc.
- Use the battery at your own risk.
- Do not open the Hatch Compartment under any circumstance when in the water or with wet hands. **ALWAYS KEEP THE BATTERY DRY.**
- Never use a damaged battery or a battery that has a compromised seal or that has experienced a significant drop or shock.
- Inspect the battery before each use.
- Do not charge your battery unattended.
- In case of visible damage to the battery seal or water ingress into the battery, remove the battery to a large and open, non flammable area or completely submerge the battery in a tank of water and contact Stinger® immediately for assistance.
- **DO NOT** use the battery in temperatures lower than 0°C or higher than 40°C.
- **DO NOT** drop the battery or use a battery that has been involved in a crash.
- **DO NOT** place heavy objects on the battery or charger.
- **DO NOT** walk or stand on your battery.
- **DO NOT** use a battery different than the lithium-ion Stinger® Foils battery. If damage results from a non-Stinger®Foils battery, this will not be covered under the warranty.
- **DO NOT** disassemble the battery.
- **KEEP BATTERY AWAY** from heat sources, microwaves, freezers, or pressurized containers.
- **IN CASE OF FIRE**, extinguish with cold water without additives or dry powder in large amounts.
- **DO NOT** dispose of batteries in regular trash containers. Follow local regulations for the disposal and recycling of batteries

Battery Safety

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Unboxing the eFoil

The eFoil arrives in 3 boxes



Box 1

- The eFoil battery and case



Box 2

- Front wing
- Tail wing / Stabilizer
- Fuselage
- Propulsion Mast
- Battery Charger & AC Cable
- Hand controller, Strap & Charger
- Toolkit
- Stinger Stickers
- Hardware pre-placed in foil for easy setup



Box 3

- The eFoil board

Toolkit and remote



- 4/5 mm Hex T-Handle tool



- Hand controller
- Charger with USB cable

The Components

The board comes in 2 sizes



5'7 Red Rocket

6'1 Green Machine

Hatch Compartment



- Battery
- Bluetooth ESC Hub
- Data cables
- Bluetooth Antenna

• DO NOT OPEN HATCH COMPARTMENT WHILE IN WATER FOR ANY REASON

Wings



Manta Ray II

- The Manta-Ray II provides renowned glide and speed in a mid-high aspect range for riders weighing over 190 lbs. / 86 kg.



Devil Ray

- Performance, speed and glide are what makes the Devil-Ray the ultimate Foil for all riders.

Propulsion Motor



- 5000 watt brushless direct drive motor

28" Propulsion Mast



- 3 phase connectors are built in

Bluetooth ESC Hub



- Battery cable
- Color coded phase connector ports

Battery



- Each green circle represents about 20% battery life
- Plug connector on top

Hand Controller



- LCD screen shows battery life and speed percentage



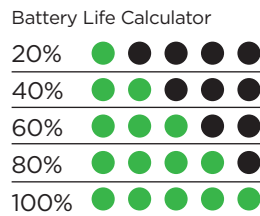
Charging the Battery

- 1 - Before charging, please connect the DC terminal to the battery first, then connect AC terminal.
- 2 - After charging complete, unplug AC terminal first, and then unplug DC terminal.
- 3 - Be sure to unplug AC and DC terminals when not charging.
- 4 - LED1, the power on indicator will show red when charger is starting up.
- 5 - LED2, the charging status indicator will show red while charging and green when charge is complete.

Full Charge will take around 3 hours

ATTENTION

- DO NOT cover the charger or intake while charging.
- Charger should be placed where children can not touch it.
- Charge battery in an indoor area with good ventilation and heat dissipation.
- DO NOT charge in high temperatures or humid areas or near explosive gas surroundings
- DO NOT disassemble the charger.



Pre-Ride **Assembly:**

Installing the **mast:**

- 1 - Locate the mast of the board. The top of the mast has a rubber seal on the surface with three phase connectors.
- 2 - The phase connectors will feed through the port at the bottom of the board. Steady the mast as you pass them through.
- 4 - Use both hands to secure the mast and press down firmly as the rubber seal seats into position.
- 5 - While holding the mast in place with one hand, thread in the M8 screws by hand, then tighten using the provided hex tool.
- 6 - Be sure that all edges of the mast base are seated firmly against the bottom of the board.

Installing the **wing:**

- 1 - Locate the fuselage, front wing, and stabilizer (rear wing).
- 2 - Connect both wings to fuselage with the M8 screws.
- 3 - Then, secure the wing to the mast. Place wing cover on for protection.
- 4 - Once wing is secured to mast, flip the board on its side and open up hatchet.

Connecting the **electronics & battery:**

- 1 - To open the hatchet, rotate the latches to loosen.
- 2 - Connect the 3 phase connector wires to the Bluetooth Hub by matching the colors and pressing firmly.
- 3 - Place battery inside board's tray compartment and connect the battery cable from the bluetooth hub (red and black wire).

Booting up the **system & hand controller:**

- 1 - Press the power button. You will hear a beeping tone once all is connected.
- 2 - Close hatch lid and seal tight to ensure no water can enter.
- 3 - Power on the hand controller by holding down the power button on side of controller.
- 4 - LCD screen should turn on and show battery life and E-SURF. You are now paired.
- 5 - Make sure the propeller is free and clear, and give the controller a small amount of throttle to spin the propeller.
- 6 - Then turn off controller by pressing the power button again and head down to water!

Post-Ride Guide:

Powering Down:

- 1 - As soon as the ride is over, turn off the hand controller by pressing the top power button.
- 2 - Once the Stinger eFoil is completely out of the water and on land, open the hatch and simply push the power button to shut the eFoil off.
- 3 - Disconnect the data cable from the battery and gently remove battery.
- 5 - Disconnect the Phase connectors.

Maintenance:

- 1 - Make sure to rinse the outside of the eFoil, especially the motor, with fresh water after each use.
- 2 - If you see salt water, sand, or debris inside the compartment, it's a good idea to rinse it out with fresh water, drain it, and dry it out with a towel.
- 3 - If the connectors encounter salt water or debris, clean them out with fresh water and allow them to properly dry.
- 4 - Be sure the inside of the compartment is completely free of moisture before closing the hatch and storing your eFoil.
- 5 - When storing your eFoil, make sure to use the provided bags and cases and don't store them in direct sunlight. UV and excessive heat exposure can cause permanent damage.
- 6 - Don't leave the hand controller in direct sunlight for an extended amount of time.