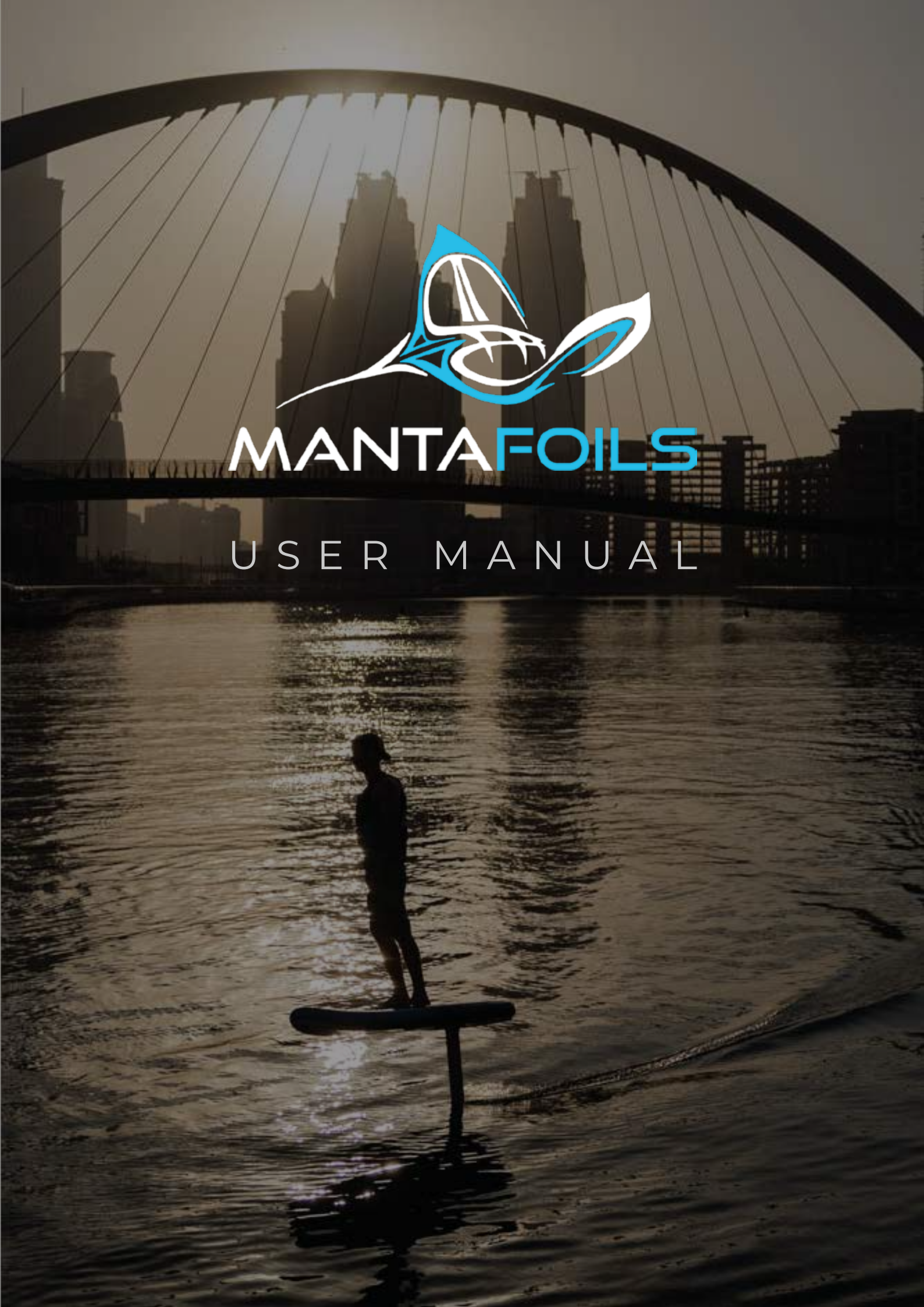


MANTAFOILS

USER MANUAL

Warranty

The product is subject to a warranty that is limited to a period of 12 months from the shipping date of the related product order. For full details about the warranty, please visit https://www.mantafoils.com/tofs

WARNING

We understand your excitement to ride your new E-foil. However, read the following section carefully to ensure logevity of the product and safety of the rider. Failure to comply to these warnings may result in serious injury or death of the rider or other. Please fully read and comply with the user manual before use. If you are unsure how to operate the device, contact your dealer.

Use of the product and particiaption in the sport may lead to risk of injury or death. By usnig this product, the user accepts the inherent risk of use.

Note

The information contained in this User Manual contains the latest information available at the time of printing. Mantafoils is committed to continuous product improvements and reserves the right to modify the product, components, specifications or other aspects of the Mantafoils product without advance notice.

This manual is recorded to facilitate the user with all required information for the assembly and maintenance of the Mantafoil Volt 3 e-foil. For any further assistance on troubleshooting issues not included in this manual, kindly contact the mantafoil support team at **support@mantafoils.com**

UNBOXING

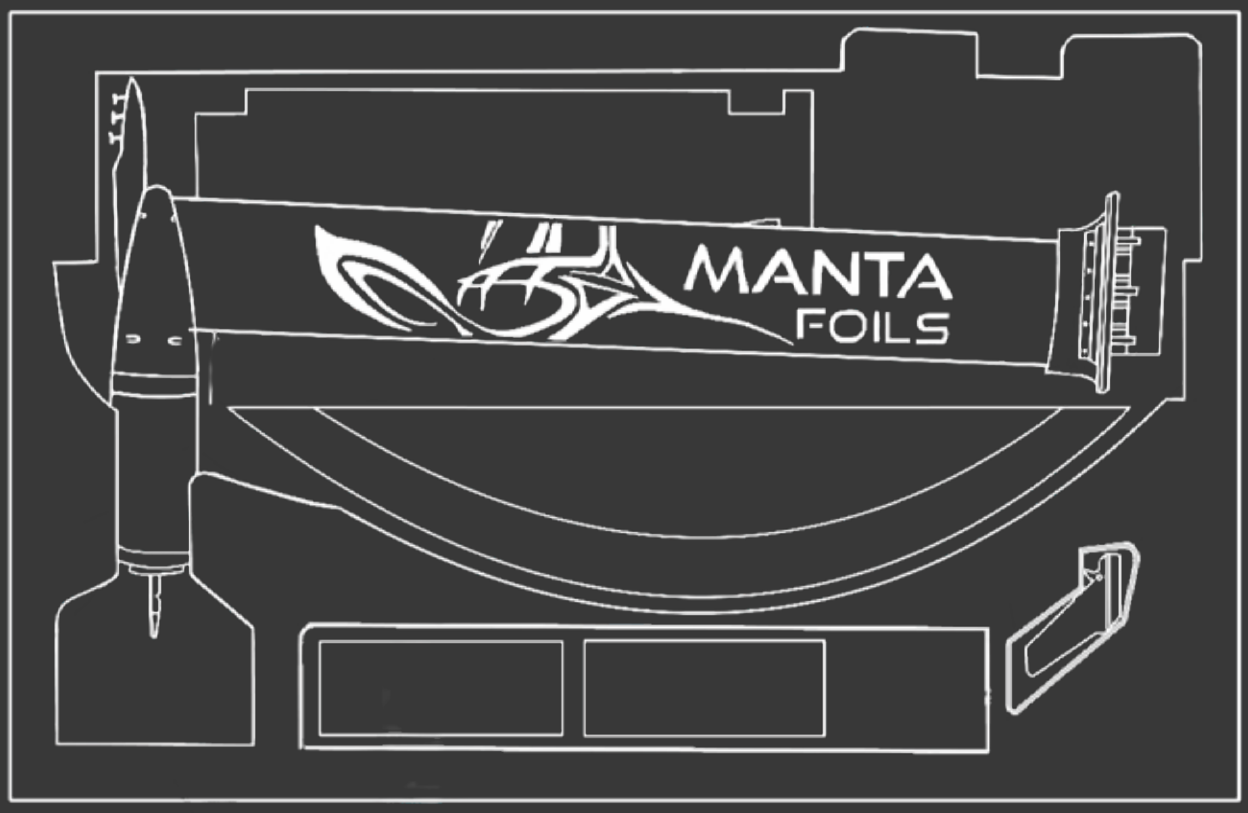
The Volt 3 e-foil will arrive to you in 4 separate packages:

- E-foil Propulsion Unit
- E-foil Surfboard
- Battery
- Battery Charger

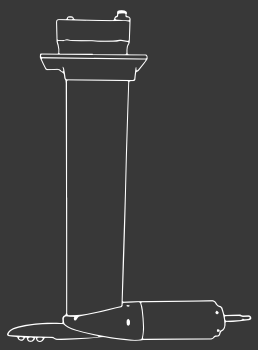
PACKAGE 1: E-foil Propulsion

E-foil propulsion unit

The E-foil propulsion unit package arrives in the E-foil travel bag along with the choice of wing(s), propeller, prop guard and accessories kit.



The Volt 3 e-foil propulsion unit is made available in two masts lengths

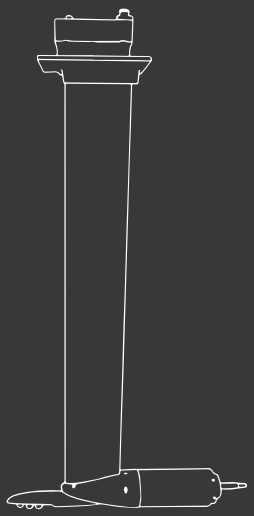


Volt 3 - 65cm

65cm long mast is for beginners and preferred for heavier riders.

Preferred for inflatable boards and suitable for most riders.

Adapted for riding in flat waters.



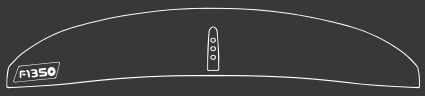
Volt 3 - 85cm

85cm long mast is for intermediate and advanced riders.

Suitable for carbon boards and allows riders to carve like nothing else.

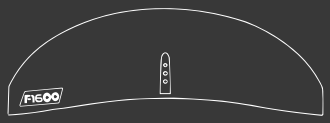
The extra mast length also provides peace of mind when cruising at high speed or riding in choppy waters.

as well as four wing sizes



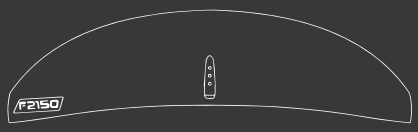
GLIDER WING 1350 cm2

The Glider 1350 cm2 high aspect e-foil wing will improve top speed and range and at the expense of lower lifting power. Not suitable for sharp turns carving.



FREERIDE WING 1600 cm2

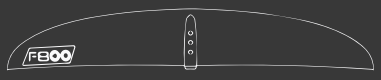
The Freeride 1600 cm2 e-foil wing is the standard choice for most riders. It enables stable low to medium speed flights and long range and turns smoothly. It will allow heavy riders to fly easily.



LIFTER WING 2150 cm2

The lifter 2150 cm2 e-foil wing is dedicated for heavy riders for which the freeride 1600 cm2 is not enough. It enables stable low speed flights and long range and turns smoothly.

It will also allow heaviest riders to fly easily.



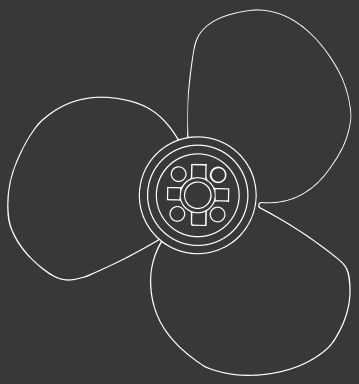
RACE WING 800 cm2

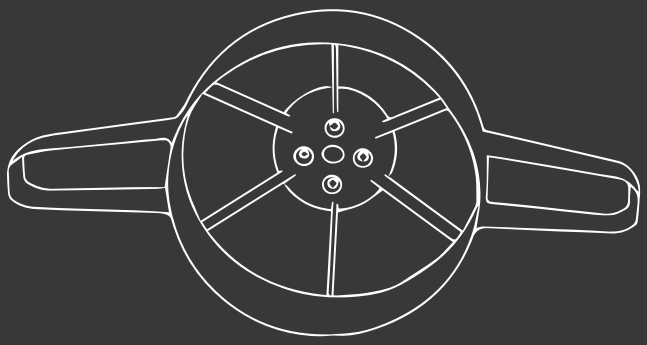
The Race 800 cm2 efoil wing is designed for riders seeking for higher speed and more aggressive carving capability.

It is recommended for advanced riders only.

along with the **PROPELLER AND PROP GUARD;**

The Innovative prop guard design has a built in stabilizer , Adjustable angle system, Water breaching capability and also reduces risk of injury from propeller and wing tips.



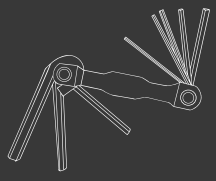


Remote Control

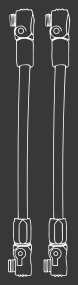
Wireless charging pad
and cable

Tef Gel

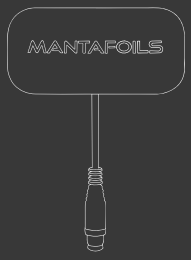
Reelx Anticorrosion Gel



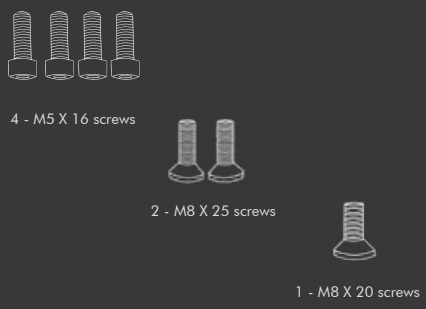
Hex key Set



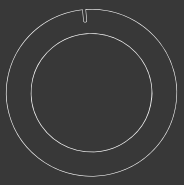
Power Cable Set



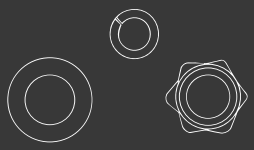
Receiver Unit



Screw Set

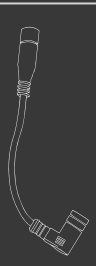


Spacers X 2



M8 nut
M5 washer x4
M8 washer x 5

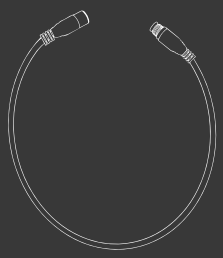
Propeller Pin



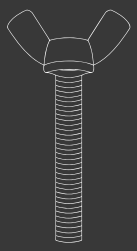
90 Angle Cable

For Carbon Boards

M8 x 35



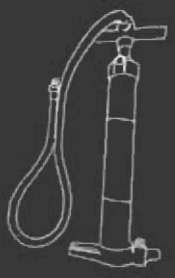
Data Extension Cable
70cm



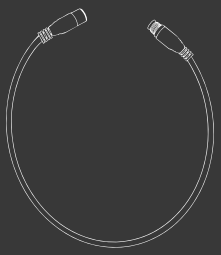
Butterfly Screw
40mm

Additionally, the following accessories are also included depending on the board type

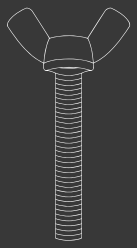
For Inflatable Boards



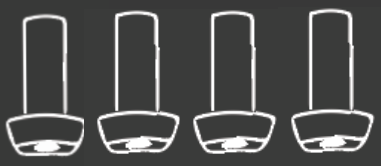
Air Pump



Data Extension Cable
70cm



Butterfly Screw
40mm



M8 x 20

PACKAGE 2: E-foil Surfboard

The E-foil Surfboard arrives in its own surfboard bag. The available board types are:

INFLATABLE

Easy to transport when deflated and folded in half. The inflatable robust material will prevent damages when handled on sensitive surfaces such as yacht decks. Additionally, the soft material reduces risk of injury.

CARBON

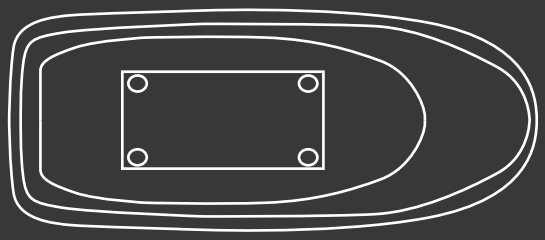
The Carbon boards are low volume and light weight. They provide a more rigid base and allow for advance level manoeuverability.

The four available board sizes are

INFLATABLE

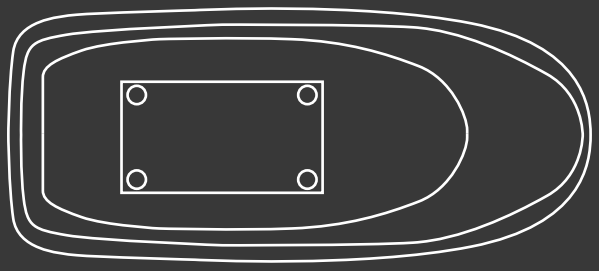
110 litres

The Inflatable 110L suits most riders. Easy to transport when deflated and folded in half.



145 litres

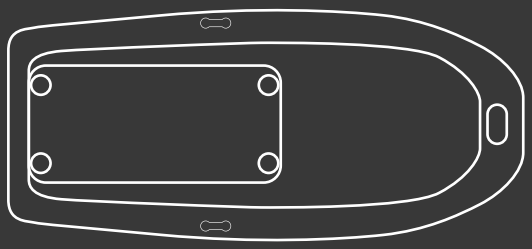
The Inflatable 145L is similar to the Inflatable 110L with an additional 35L to suit heavier riders.



CARBON

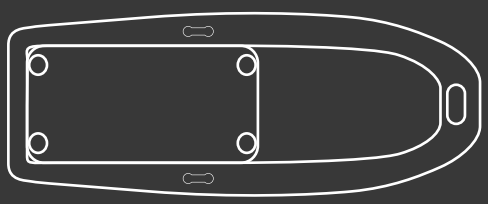
95 litres

The Carbon 95L features high rigidity and medium volume for good all around performance.



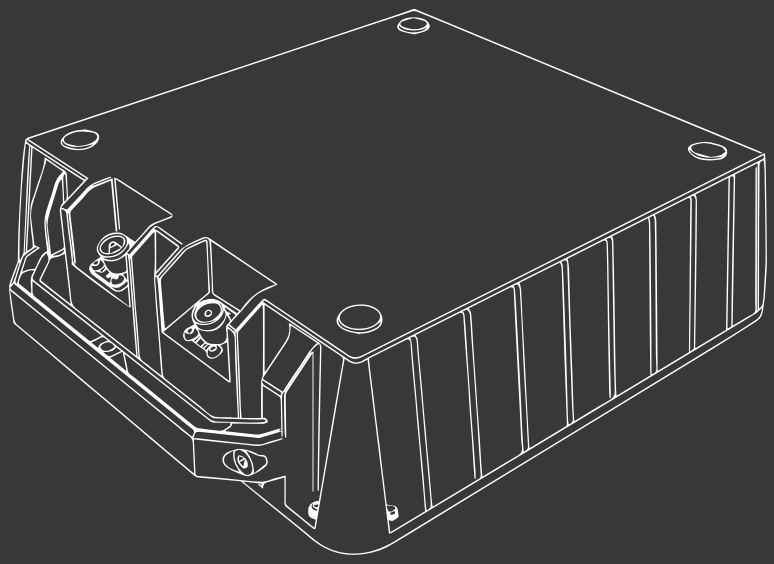
65 litres

The Carbon 65L board's low volume and size makes it the perfect toy for advanced riders. The narrow shape allows for high carving angles and high speed.



PACKAGE 3: Battery

The 50Ah - Long range smart battery



- Ride time up to 140min
- Fully waterproof (IP67)
- Bluetooth connectivity, battery status accessible via Mantafoils smartphone app
- Safety features such as short circuit protection, temperature and discharge monitoring

PACKAGE 4: Battery Charger

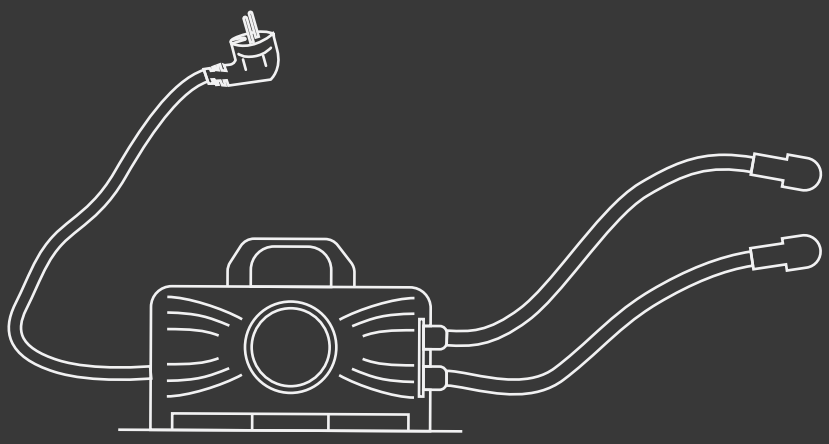
There are two types of battery chargers

STANDARD CHARGER

The standard charger is 15 Amps and require approximately 4.5 hours of charging

FAST CHARGER

The Fast Charger is 25Amps and require approximately 2 hours of charging.



The Volt 3 E-foil has a simplified assembly process for the user. It is important to read through this section carefully and follow the assembly procedure listed below to prevent damage to any parts.

Step 1 - Board Assembly.
Step 2 - Attachment of foil to the board.
Step 3 - Assembly of wing to the e-foil.
Step 4 - Assembly of propeller and prop guard.

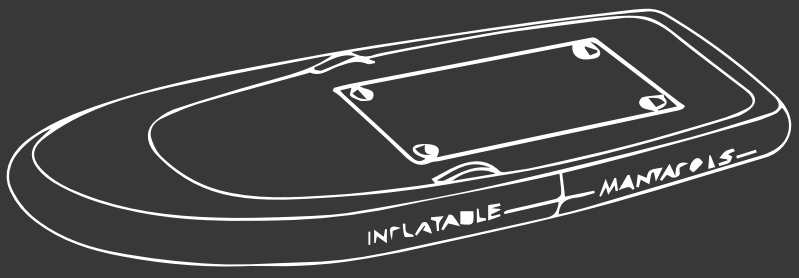
STEP 1: Board Assembly(Inflatable Board Only)

This section does not apply to carbon board users. Skip this section if you have a carbon board.

Inflating the board

Tools required: Air pump 

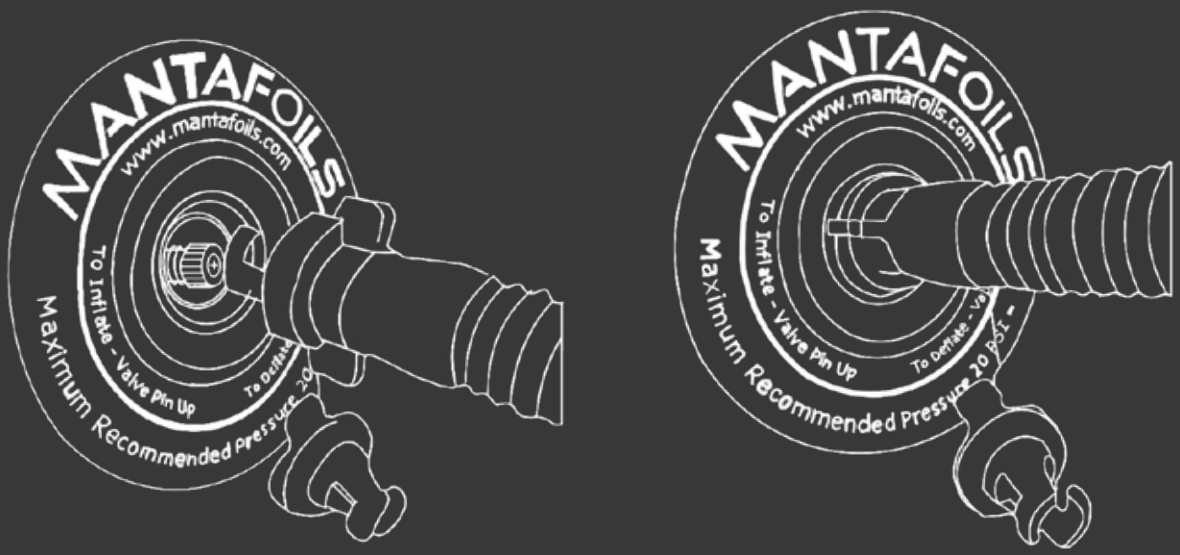
Begin your assembly in a clean and flat area free of any sharp objects that could potentially dent or scratch your parts. For the Inflatable Board, remove the board from the board bag, unstrap the belt straps and lay it out with the battery compartment slot facing up.



Begin by twisting the valve lock open located at the nose of the board. Rotate anti-clocwise until the valve pin pops out to lock air inside the board.

NOTE: If the valve pin is not outward, air will not be retained in the board while inflating.

Attach the pump hose into the valve and twist clockwise until it's locked into place and inflate the board to 15 PSI.



Once your board is fully inflated, detach the pump and close down the knob.
NOTE: If the board is stored inflated, it is normal for air pressure to reduce over the course of time.

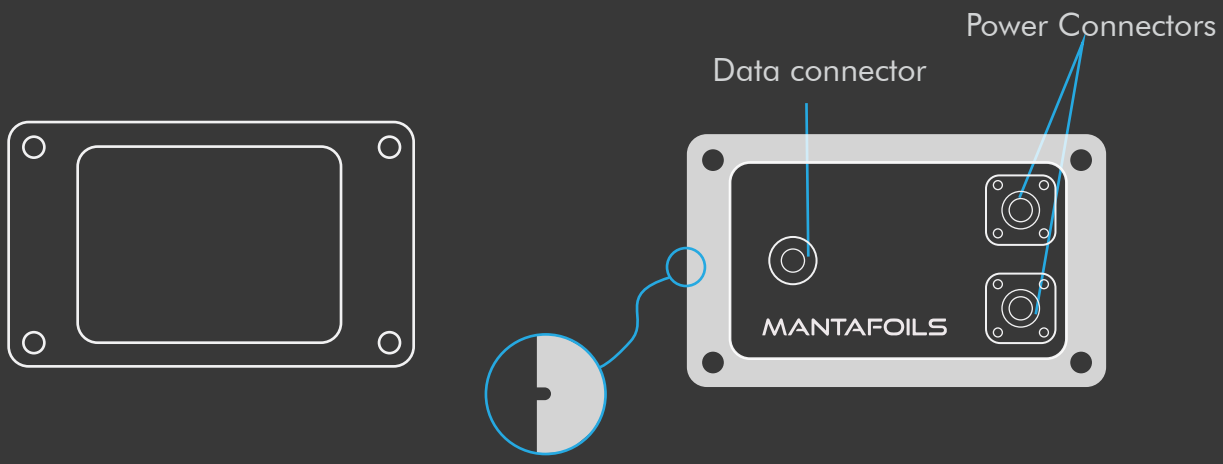
3- Attachment of foil to the board

Tools Required: Hex Key Set, Tef Gel , 4 - M8 x20 (inflatable), 4- M8x35 (carbon),

4- M8 washers

Flip the board and place with battery compartment face down on the ground. The screws to attach the board and the foil come placed in their respective slots. The screw sizes for carbon boards are M8x35 and for inflatable are M8x20

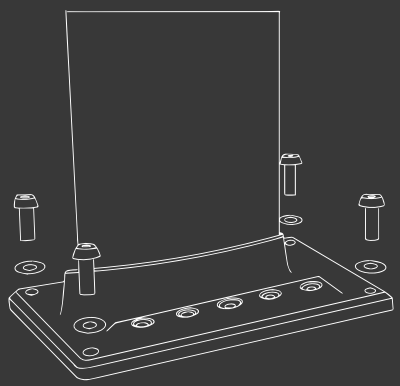
Remove the screws on the board and place the seal on the foil head. Ensure the seal is in place.



The groove should be kept on the data cable connector's side

Apply Tef gel into the screw threads and screw down foil in place with the M8 washers provided using the hex tool set. The screws must be secured tightly.

NOTE: Always apply tef-gel to any screw inserts and for extended usage loosen the screws and reapply tef-gel every few weeks. This is to prevent corrosion of the aluminium surface in contact with the screws.

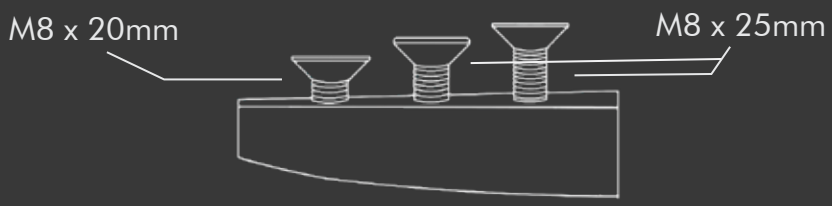


4- Assembly of wing to the e-foil

Tools Recquired: Hex Key, Tef Gel, 2 - M8 x 25 screws , 1 - M8 x 20 screws

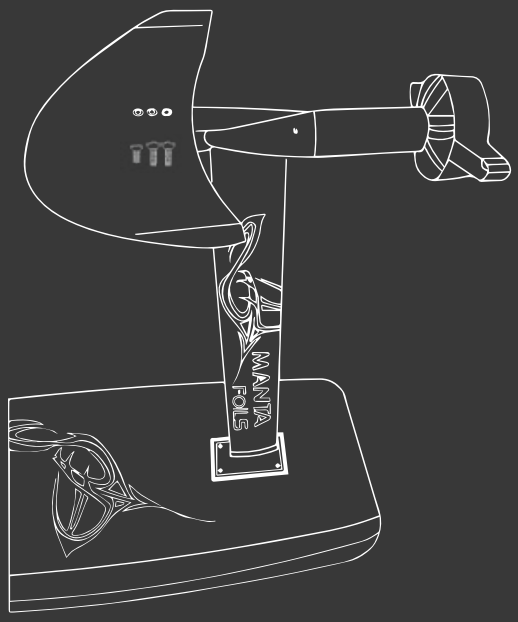
Ensure the previous steps of assembly are completed before proceeding to this section. This will ensure easy installation and protection of your e-foil parts.

The screws to attach the wing to your fuselage also come positioned in their respective screw slots. When assembling the wing on the foil, the protruding spine of the wing should be the part in contact with the fuselage.



NOTE
Pay close attention to the placement of screws according to their respective sizes. The longer two screws must be the towards the propeller and the shortest must be towards the nose of the fuselage.

Use allen key size of M8 from the provided tool kit and tighten the wing to the foil. The wing must not wobble on the foil and must sit sturdy in place.



5- Assembly of propeller and prop guard

Tools Recquired: Hex Key, Spacers, M8 Bolt, M8 washer, M5 screws x4, M5 washers x4

This section is broken down into three subsections:

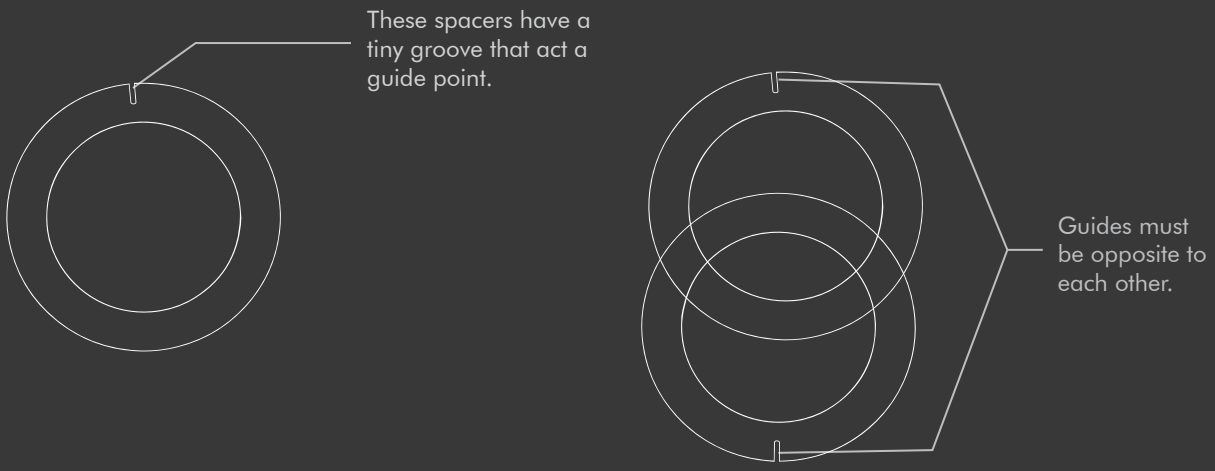
1.Placing the spacers on your motor.

2.Attachment of prop guard to your e-foil.

3.Attachment of propeller to your e-foil.

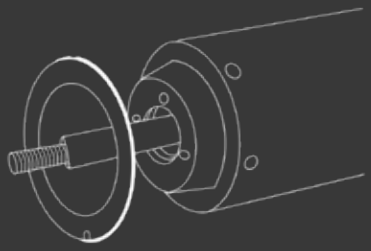
IMPORTANT: WHEN ASSEMBLING THE PROP GUARD AND PROPELLER ENSURE YOUR FOIL IS DISCONNECTED FROM THE MAIN BATTERY POWER TO PREVENT SERIOUS INJURIES

PLACEMENT OF SPACERS ON YOUR MOTOR



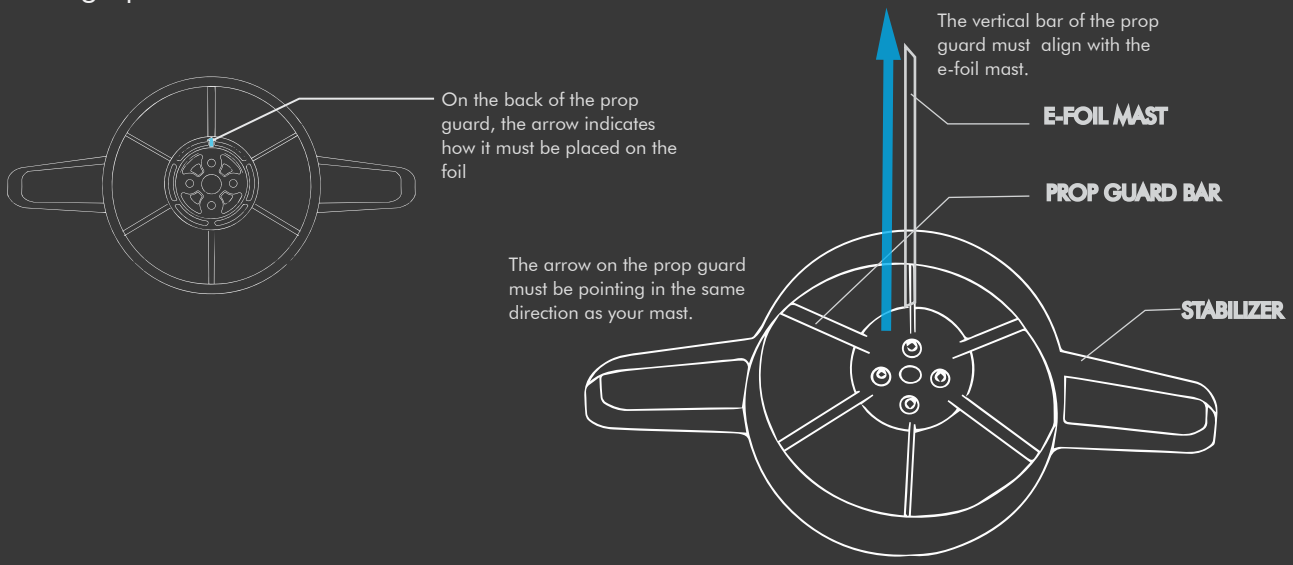
There are guide points on the spacers as shown in the figure above. Place both spacers flat on top of each other with guide points vertical and in the opposite direction of each other. Rotating the spacers in the opposite directions changes angle of the stabilizer wing and the pitching power of the e-foil.

2. Ensure the spacers are aligned together as one, place it flush on the motor head as shown in the figure. The spacer must be placed vertically with the guide points opposite to each other.



ATTACHMENT OF PROP GUARD ON YOUR E-FOIL

1 . On the prop guard, there is an arrow that indicates the positioning on the efoil (refer to figure 3). After the spacer has been placed on the foil, place the prop guard with the arrow pointing upward in the same direction as the mast.



2. Align the prop guard as depicted in the figure below. Ensure the stabilizer is parallel to the floor and the bar of the prop guard aligns perfect vertically with the mast. Once the prop guard is aligned, screw it down with the screws provided.

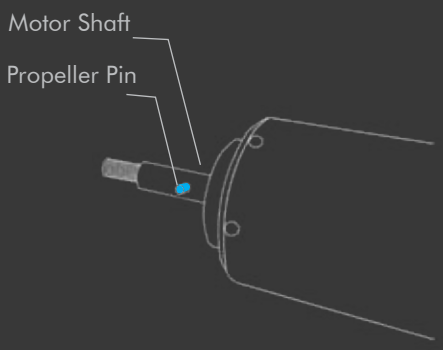
Depending on your kit, you will be provided with the correct quantity of screws. If you have two screws, place them with the 5mm washers on opposite screw slots.

NOTE: It is crucial that the screws are secured tightly on the prop guard at all times to ensure long term use of your e-foil.

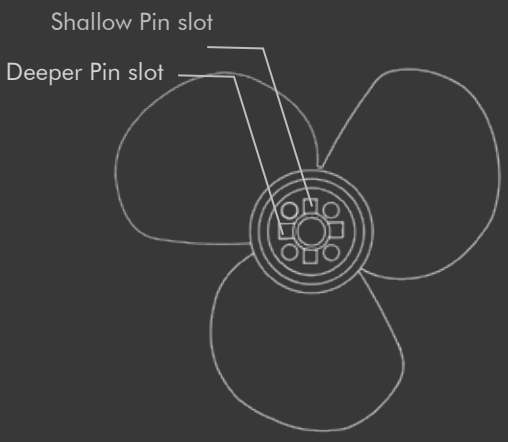
ATTACHMENT OF PROPELLER TO YOUR E-FOIL

IMPORTANT: The images in this section are merely to provide a clear view of the propeller assembly. DO NOT assemble the propeller without the prop guard at any instance on your foil

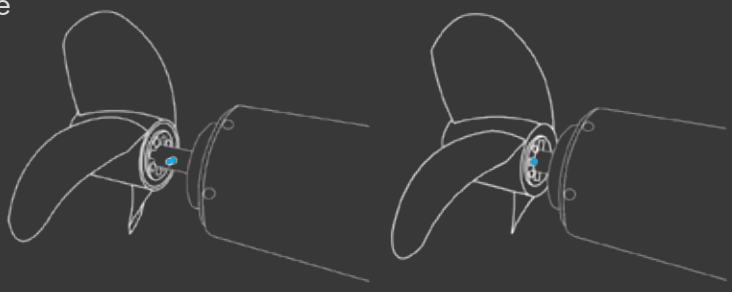
1. Place the propeller pin provided into the motor shaft and rotate the shaft so that the pin is horizontal to the floor. This position will help place the propeller with ease.



2. Behind the propeller, there are two pin slots to engage the propeller pin. If there is sufficient distance between the prop guard and the propeller pin, engage the propeller on the deeper pin slot. If there is insufficient distance, engage the propeller in the shallow pin slot.



3. Place the propeller in alignment with the pin and push in place. The pin must be fully engaged with the propeller.



IMPORTANT: When placing the propeller to engage with the pin ensure the propeller slot aligns perfectly with the pin as once in place it may prove to be difficult to remove. If you do find yourself in the above situation, use a soft tool to remove the propeller from the motor shaft, realign the propeller and move into place again.

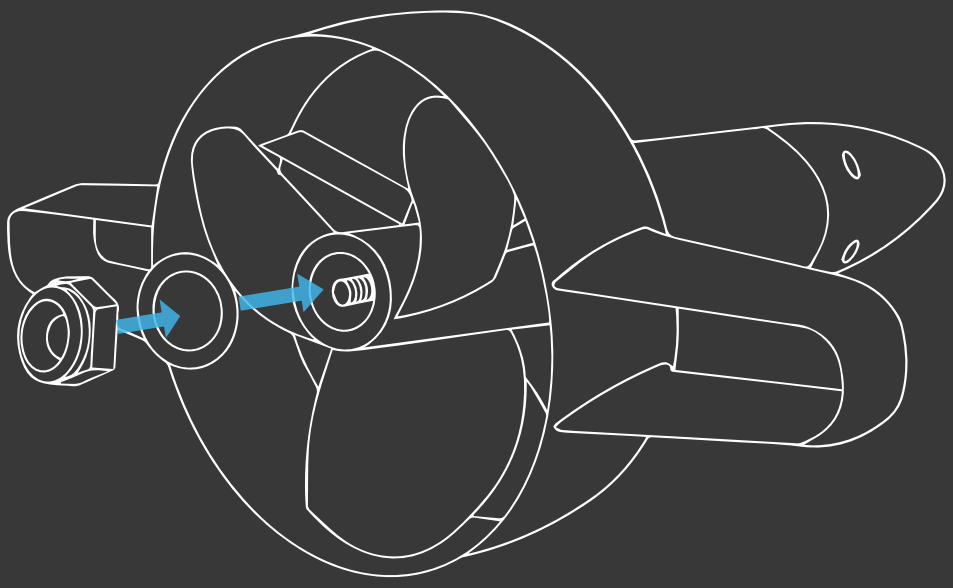
THE FINAL ASSEMBLY OF PROPELLER AND PROP GUARD

After instructions in Section I. and Section II. are followed, the final assembly of your e-foil will follow as below:

Once the prop guard is attached to the foil and the propeller is attached to the motor shaft with the pin engaged, place the washer first followed by the bolt. Lock the propeller in place using a 13mm hex nut socket wrench.

The base of the propeller must NOT touch the base of the prop guard. The indicator for correct assembly is if the propeller rotates along with the motor shaft freely and smoothly. This motion can be tested by hand. Ensure the foil is not powered on at any instance during the assembly.

IMPORTANT:
DO NOT assemble the propeller without the prop guard at any instance on your e-foil



CHARGING

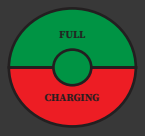
VOLT SMART BATTERY CHARGING

The Volt smart battery should ideally provide you with a ride time of 90-120 minutes depending on your weight and riding style.

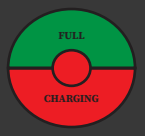
1 - Position the charger in front of the battery near the connectors.
2 - Connect the charger connectors to the battery. The orange connector to the orange plug and black connector to black plug.
3 - Plug in the charger cable to the socket. The typical charge time is 4 hours on standard charger and 2 hours on the fast charger.

The battery status is accessible via the Mantafoils smartphone application.

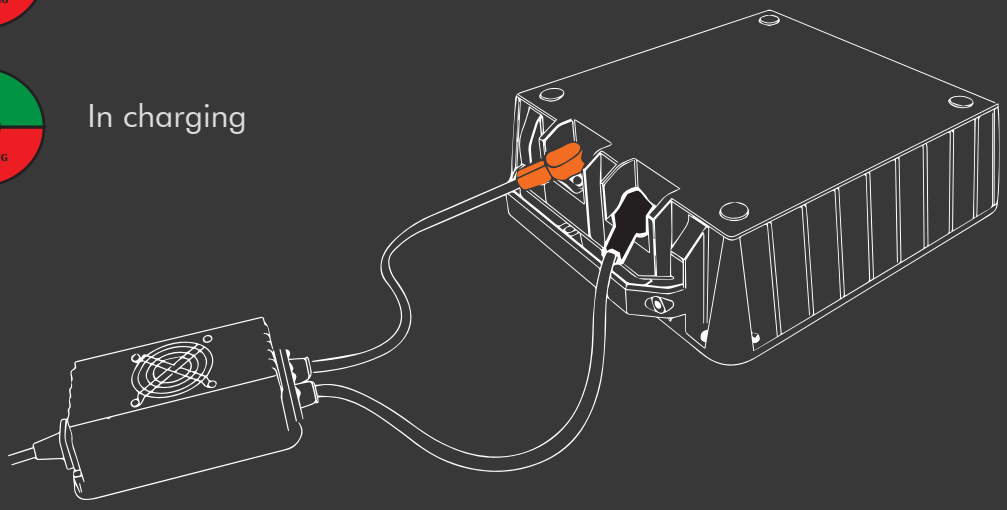
CAUTION:
Do NOT keep charger unattended while charging. If the battery heats up while in charging, disconnect charger. Charging MUST be carried out in a dry and safe location.



fully charged



In charging



After charging or when not in use, it is recommended to keep the Volt Smart Battery stored in an optional fireproof case.

CHARGING

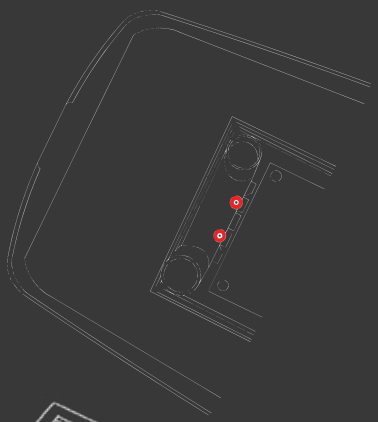
The battery charger has an LED status indicator. The indication description is listed below. The '-' indicates a second pause. The status should be read from the power ON state of the charger to the battery.

Indicator State	Fault Indication	Solution
Red Green	No power	The connection between charger and battery is not secure or battery voltage is too low. Recheck if connectors are plugged in correctly.
Red-Green-Red - - -	Over Voltage	Switch off main power and retry. If error still persists, contact sales@mantafoils.com
Red Green Red Green --	Ambient tempera-ture too high.	Check if battery is kept for charging in a cool and ventilated
Green Red ----	Output Under Voltage	Ambient temperature is too high. Check if battery is kept for charging in a cool and ventilated
Red Green ----	Output Under Voltage	Contact sales@mantafoils.com
Red Green Red Green -	Input AC abnormality	Contact Mantafoil Support team.

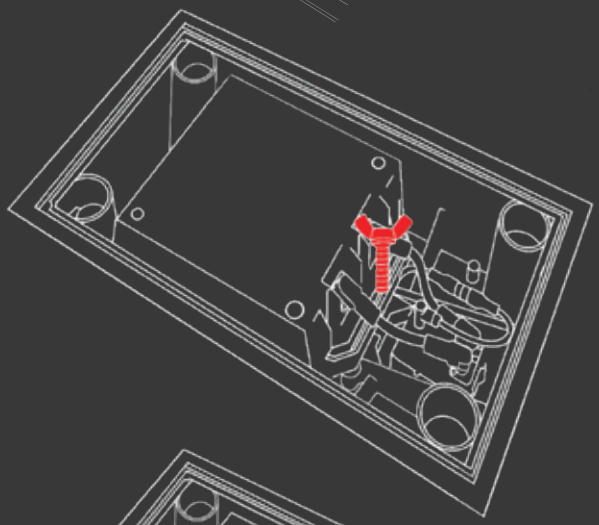
If any issues persists, contact mantafoils support team at support@mantafoils.com.

INSTALLING THE BATTERY

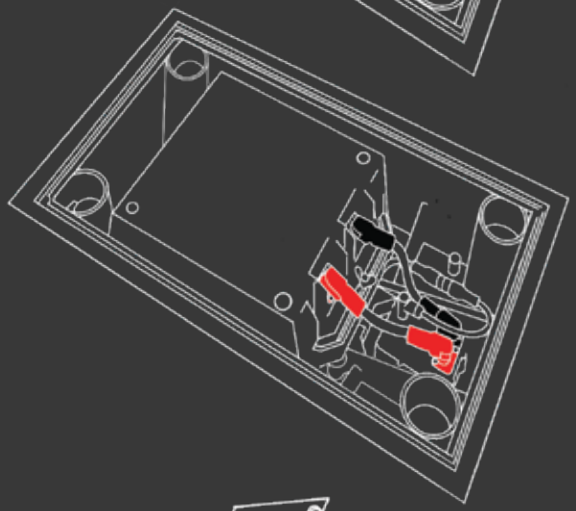
The next step is installing the Volt smart battery. Hold the battery by the handle and carefully lower it into the board cavity, placing the battery in the slot with the connectors on the battery are facing upward. To ensure the battery is secure in position, the bottom of the battery must lock in place under the two washer clips within the slot.



Once the battery is in place, lock into position using the butterfly screw. Ensure the screw is tightly secure.



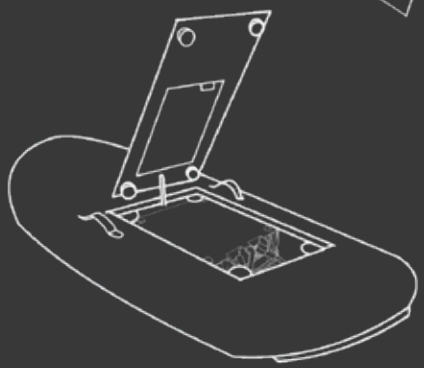
Next, use the power cables to connect the battery to the foil. The orange connector on the battery is connected to the orange connector on the foil and the black connector on the battery is connected to the black connector on the foil. There should be an audible click when the connectors lock into place.



Closing the battery compartment powers on the foil. Ensure that nothing is caught between the seal of the battery compartment and is closed properly.

CAUTION:
Be careful not to damage the seals of the battery connectors.

Do not ride the foil unless the battery is locked into place properly.

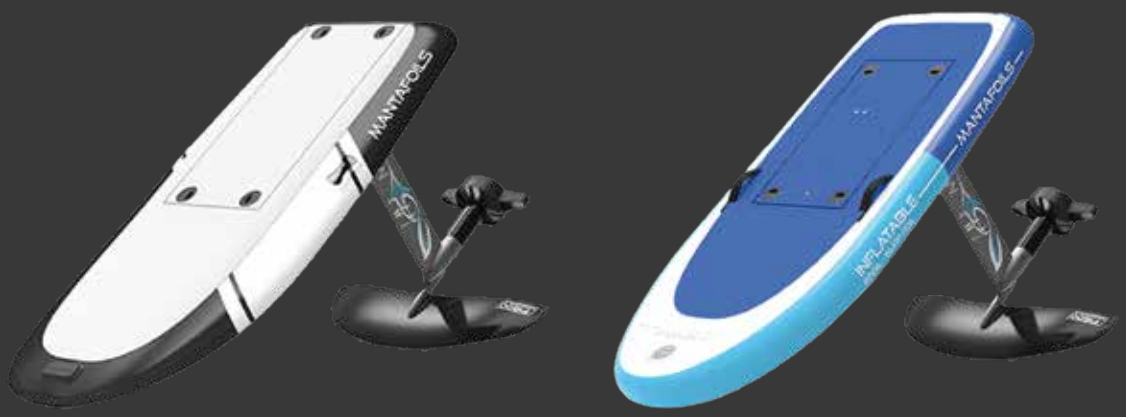


NOTE:
The board has been designed to have the battery compartment filling up with water to provide additional cooling to the battery. The water will drain out through the designed one way ball valves from the foil plate head while you ride.

RESTING AND CARRYING YOUR BOARD TO THE SHORE

Before each ride, check that no screws are loose and the prodduct is free of any damage. Should your product be damaged, contact your seller and refrain from using the product.

When you place your board on the shore, ensure that the nose of the surfboard is in contact with the sand and the propeller is facing upward. Alternatively, you may keep the board on its side. Pay attention to the wing tips while placing the board to prevent any damages.



After ensuring your board has been assembled and installed correctly with charged batteries, you are now ready to try out the board. Carry the board to the water shallow enough to create a fair distance between the propeller and ground.

The board has side handles designed to carry it. Hold the board with one hand holding the handle and the second hand holding the mast. You may need to adjust your hand position on the mast to find the right balance.

CAUTION:
When lifting the board off the shore, pay particular attention to lift the wings completely to prevent the tip pressing on the ground and avoid wing breakage.

Do not aim to drag the board into the water as it could risk damaging the parts and lead to personal injury while in use.

GETTING ON THE BOARD

Ensure that you are aware of your surroundings and others when in use of the product. Refrain from using the board in a crowded environment.

CAUTIONS:

Ensure that the wings and propeller never get into contact with the seabed as it could get trapped in the sand beneath or hit rocks and possibly damage the part.

Hold the remote in your dominant hand and tighten the remote band onto your wrist. Contact with the wings or propeller could lead to serious injury or death.

Do not turn on the remote when you or others are standing too close the propeller.

Do not step on the wing when climbing onto the board.

Wear tight swimwear and secure hair in place before you begin your ride.

When ready to go, climb onto the board staying on your chest and try to reach for the board's nose. Keep the elbows tucked to the side supporting your chest on the board and your feet on either ends at the bottom of the board.

Adjust your bodyweight toward the front of the board so that the board stays parallel to the water. In case the nose of the board lifts above the water, move yourself toward the front of the board. This will ensure better control and stability on the board. You are now ready to ride.

Note the position of the receiver only for inflatable boards is at the top front of the battery compartment. Since the board is designed to let water in, excessive weight on the board may lead to receiver immersion and loss of signal to the remote. Should this happen, you may either tilt the board a bit sideways to release water out. You may alternatively point the nose a bit upwards.

RIDING YOUR BOARD

1 - Gently and gradually press the trigger to increase the throttle of the motor.

When riding the first time do not try to go fast, just maintain slow speed to get used to the board dynamics and balance.

CAUTION:
Do not press trigger fully when you start out riding the e-foil especially while the throttle start mode is above 25% as it could lead to a board wipeout and lead to injury or death.

2- To navigate your board to the left or right, lean slightly towards your desired direction and the board will follow your movement. The more you are positioned back of the board the sharper the turn will be.

3- Once you are comfortable riding the board lying down, maintain constant speed to gradually move onto your knees whilst keeping the bodyweight on the front half of the board. Placing your hands on the board, push your body up and move your knees under you. Should you feel the foil lifting, move your body forward so that the board stays in contact with the water.

4 - Upon managing to control your throttle speed and body balance, you may slowly transition to your feet. Start putting your front feet forward while holding the board nose with your hand. Hold the trigger steady to avoid speed change while performing this body position transition.

5 - Always remember that weight pressure to the front of the board maintains it on the water. Only release front pressure when you are ready to fly. It is good practice for the rider to begin without flying at the very first ride and gradually attempt short flights while bouncing the board to the water.

6 - When the rider is familier with the process, the rider can release the pressure at the nose of the board until it lifts off.

7- Moving body back pitch up the board, Moving forward pitch it down. Similarly throttling up pitch up the board while throttling down pitch down.

Note:
It is important to be smooth and precise with the trigger pressing and releasing. While learning you may hold the trigger fully and use the buttons to fine tune your speed.

8 - Practice makes perfect. Take your time out to get comfortable using the board and navigating it and maintain your throttle speed.

9- When starting out, wipeouts are normal and contribute to your learning process.

NOTE:
When you fall off the board, always immediately fully release the throttle trigger. This will automatically lock your remote.

10. Your weight plays a critical role to maintain balance on the board. Learn to adjust your weight on the board. Try to always maintain the board parallel to the water. If the nose of the board projects upwards you will topple off the board.

CAUTION:
When falling, Always try to fall away from the foil. Learning how to fall is an important part of the process and is key to reduce risk of injury or death.

POST RIDE

GETTING BACK TO THE SHORE AND POWERING OFF

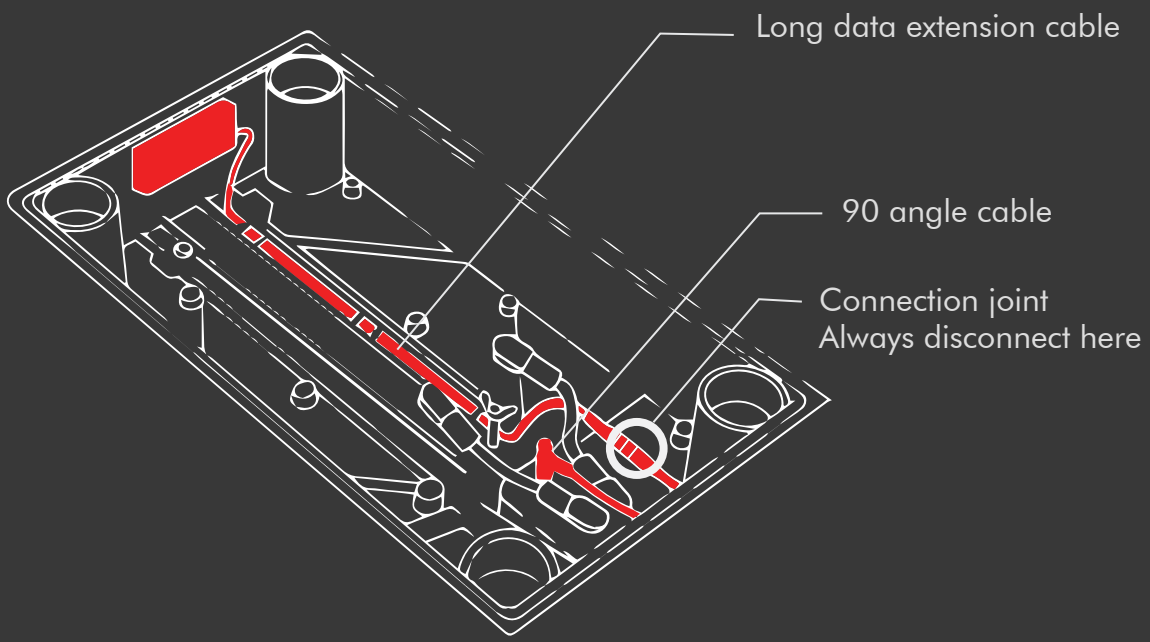
1 - When you have finished riding your board, ensure to power the remote controller off by holding down the middle menu button for 5 seconds.

2 - Safely carry the board back to shore. You may carry the board from the handle and mast similarly to the technique used to carry the board to the water.

3 - Once on the shore, open the battery compartment. This will disengage the magnet and power off the foil.

4 - Detach the battery from the board by unscrewing the butterfly key from the lock. Disconnect the power connectors from the battery and replace the red caps back on the battery connectors to protect them and separate the battery from the board.

5 - Should you need to disconnect the foil from board, disconnect the long data extension cable from the 90 angle cable at the connection joint indicated in the figure below. Do not disconnect the 90 angle from the foil head. This connector shall be connected to the head at all time.



POST RIDE CLEANING

Ensure the following steps are repeated after each use and as needed to enjoy your future rides.

1 - When you are done using the e-foil board, spray down the board with pressurized fresh water to clean the board of any sand residue and salt water.

2 - Check to see if any debris has invaded the battery compartment or connectors. Rinse it out and dry with a towel.

NOTE:
Ensure the connectors and battery compartment is dried completely before being stored away.

3 - Rotate the propeller carefully by hand and rinse off excess sand residue.

4 - Wipe down the board and its accompanied parts clean with a dry towel.

MAINTENANCE AND STORAGE

1 - The e-foil and Battery MUST be stored in a cool and dry place. An exceeded duration of exposure to UV rays may lead to damages on the board and parts in addition to risk of fire. Additionally you may store the battery into purpose made fire retardant aluminum cases for enhanced safety.

2 - For increased longevity of your board, every few weeks reapply tef-gel to the fuselage and wings screw slots.

3 - Apply ReelX liquid to the connectors on regular basis (once every 15 rides)

Download the Mantafoil application from Google play store or Apple store on your device. The QR links are included below.

The official Mantafoils app

Available on the Google Play

Available on the App Store

Once the logs access is enabled, open the Manta-foils application and click on the ride logs icon.

Connect to the Manatfoils wifi network and click ‘connect to remote’. To view your ride logs click ‘show old logs’.

All the ride logs will appear listed. Click on any of the log files to view details of the ride.

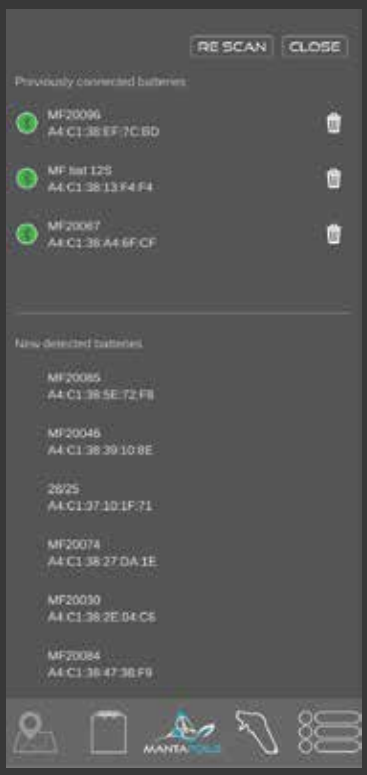
On this page, the ride can be replayed and view other data like the remaining battey percentage, the kilometers travelled and so on.

Clicking on any of the data presented will open an expanded window view of all the available ride information.

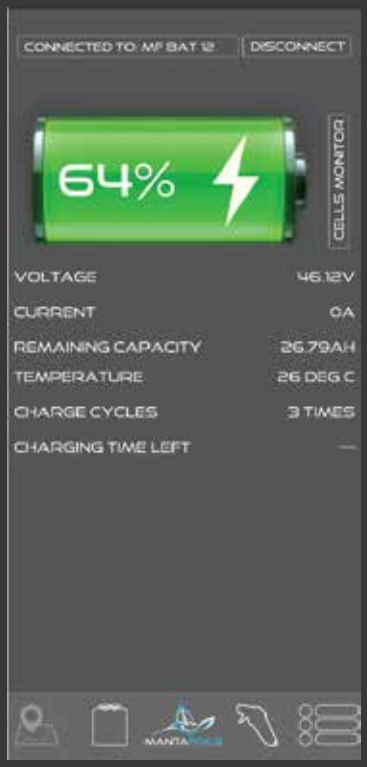
The Volt Smart Battery status can be monitored on the application. Ensure the bluetooth and location is enabled on your smartphone. The serial number of your battery is found on the bottom right conner.

Click on the battery icon.

Click scan to scan and connect to your battery.



Within few seconds, the Battery should appear. Under 'new detected devices'. Click on the serial number of your battery to connect.



Once battery is connected, the battery charge percent is visible along with other battery parameters. Swipe right to monitor battery cells

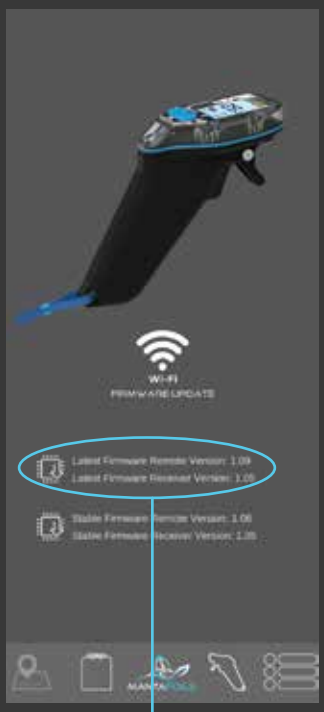
The battery cells are displayed on this page. the cummulative value is the present total voltage of the battery.

A validating check on your battery would be to ensure the cell voltages must be in the same range of values. if any individual(s) cell is lower, discontinue use of battery and contact sales@mantafoils.com

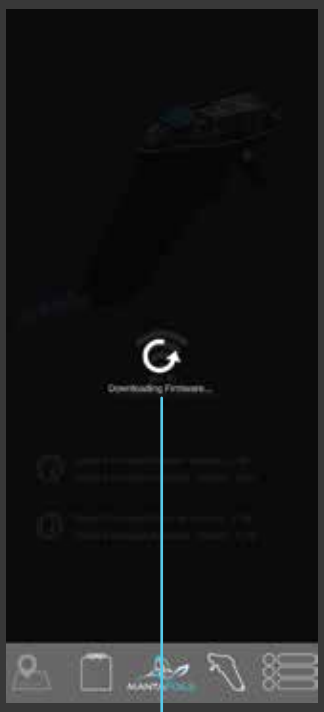
From the settings page, navigate to the firmware update page by pressing the '+ ' button.

- Make sure the remote is paired to your e-foil. (For this, read the instructions on pairing your remote with the board)

Click on the Remote Control Icon



Click on the latest firmware version



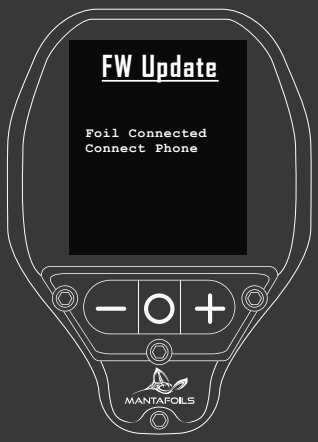
Wait for the download to finish

After the firmware update is downloaded on your mobile application, navigate to the firmware update page by pressing the '+' button seven times from the sub menu page.

- Press the 'O' button on the remote to activate the MantaFoil wifi network.
- Your remote will read 'Foil connected' and you will be prompted to connect your phone.
- Connect your phone to the MantaFoil wifi network.
- Click on the 'UPDATE' button on the application to install the update.

Wifi username: MANTAFOIL

Wifi password: Manta135



Once the installation is complete, your remote will read 'Lost Connection' and will automatically restart. This indicates that the update is successfully completed.

You can also verify the update by checking the Firmware Version shown on the start up page when the remote is powered on.

Click on the list icon to access the Mantafoil Volt 3 user manuals, tutorial guides and contact information for queries or support.

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MANTAFOILS FZ LLC
PBU C49 - Dubai Production City
www.mantafoils.com

for further questions or queries contact :
sales@mantafoils.com
support@mantafoils.com