MANTA FOILS

FUTURE IS FOILING

USER MANUAL

WARNING

We understand your excitement to ride your new efoil. However, read the following section carefully to ensure longevity 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 others. 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 participation in the sport may lead to risk of injury or death. By using 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 4 efoil. For any further assistance on troubleshooting issues not included in this manual, kindly contact the mantafoil support team at
support@mantafoils.com

⚠ WARNING

HIGH VOLTAGE, DO NOT OPEN, NO SERVICABLE PARTS INSIDE.
RISK OF ARC FLASH, ELECTRIC SHOCK, SERIOUS INJURY, DEATH.

RISK OF ELECTRICAL SHOCK.
DO NOT HANDLE WITH WET HANDS OR IN WATER.
DO NOT CONNECT THE BATTERY IN WATER

RISK OF FIRE, STORE IN DRY PLACE.
DO NOT EXPOSE TO DIRECT SUNLIGHT.

DO NOT EXPOSE HEAT SOURCE / TEMPERATURE ABOVE 45°C / 115°F.
HIGH TEMPERATURE CAN LEAD TO FIRE OR EXPLOSION.
DO NOT USE IN TEMPERATURE BELOW 0°C / 32°F.

RISK OF EXPLOSION.
DO NOT DISPOSE THIS BATTERY.
RECYCLING OF LI-ION BATTERY REQUIRES SPECIALIZED FACILITIES.

TRANSPORT THIS BATTERY PACK IN ACCORDANCE WITH ALL APPLICABLE LAWS.
REFER TO BATTERY MSDS FOR FURTHER DETAILS

DO NOT LEAVE THE BATTERY UNATTENDED WHILE CHARGING.
CHARGE IN DRY AND SAFE ENVIRONMENT.
ONLY CHARGE WITH THE SUPPLIED DEDICATED CHARGER.

DO NOT OPEN, OR ATTEMPT TO MODIFY THIS BATTERY.
ONLY USE THIS BATTERY FOR ITS INTENDED PURPOSE.

DO NOT MISHANDLE, DROP, PUNCTURE, DAMAGE THIS BATTERY.
CAREFULLY INSPECT THE BATTERY PRIOR TO EACH USE.
IN CASE OF ANY DAMAGE, DO NOT USE THIS BATTERY.

LI-ION BATTERY
MODEL MF-VOLT-14S10P
RATED CAPACITY: 50Ah / 2.6KWh
INPUT VOLTAGE: 52V NOMINAL / 15A CONTINUOUS CHARGE CURRENT
OUPUT VOLTAGE: 52V NOMINAL / 80A CONTINUOUS DISCHARGE CURRENT / 120A PEAK (10s)
POLARITY: ORANGE + / BLACK -
IP RATING: IP67 (WITH CONNECTORS MATTED ONLY)

Bluetooth™
FOR FURTHER INSTRUCTIONS REFER TO USER MANUAL

Li-ion   CE

UNBOXING

Your Volt 4 efoil will arrive to you in 3 separate packages:

- Efoil Propulsion Unit
- Efoil Surfboard
- Battery & Battery Charger

## PACKAGE 1: Efoil Propulsion Unit

Efoil propulsion unit

The efoil propulsion unit package arrives in the efoil travel bag along with the choice of wing(s), propeller, prop guard and accessories kit.
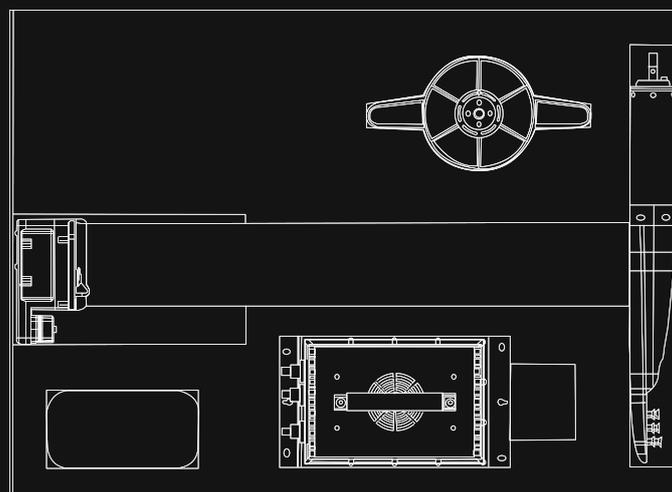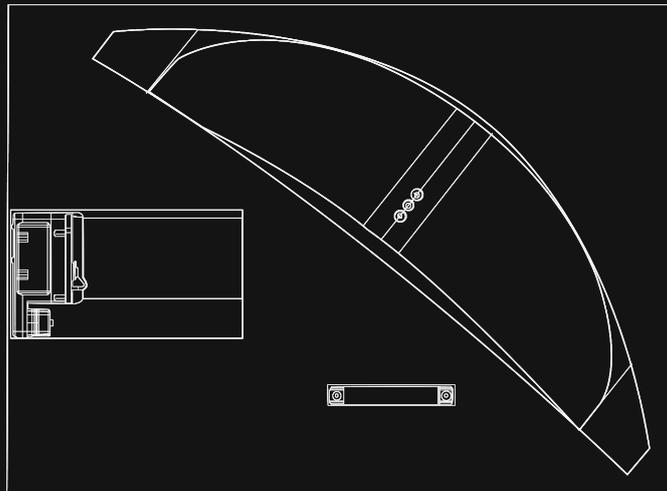
The Volt efoil propulsion unit is made available in two masts lengths
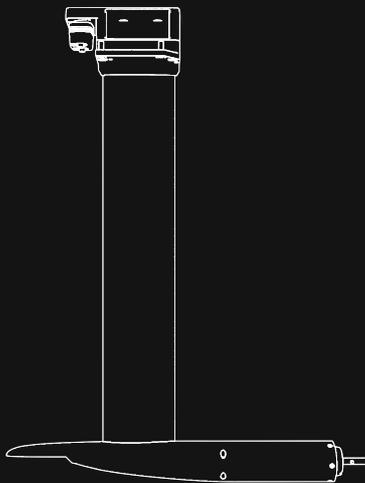
Volt 4 - 65cm

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

Suitable for most riders.

Adapted for riding in flat waters.
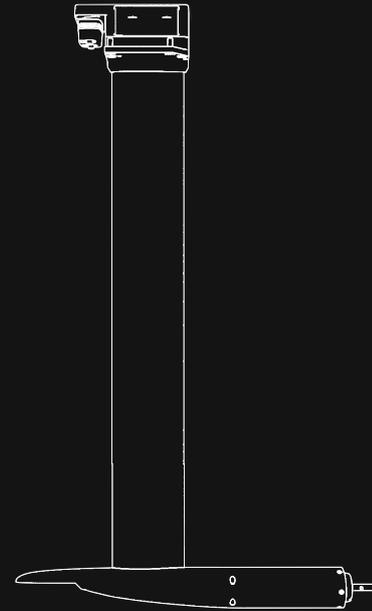
Volt 4 - 85cm

85cm long mast is for intermediate and advanced riders.

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.

and four different wing sizes engineered to meet your riding requirements

RACE WING 800cm²

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

It is recommended for advanced riders only.

GLIDER WING 1350cm²

The Glider 1350cm² high aspect efoil wing will improve top speed and range and at the expense of lower lifting power.

Not suitable for sharp turns carving.
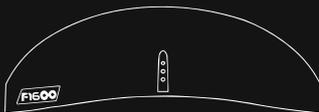
FREERIDE WING 1600 cm²

The Freeride 1600cm² efoil 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.
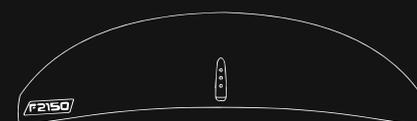
LIFTER WING 2150cm²

The lifter 2150cm² efoil wing is dedicated for heavy riders for which the freeride 1600cm² is not enough. It enables stable low speed flights and long range and turns smoothly. It will also allow heaviest riders to fly easily.

Recommended for heavy riders (above 100kg).

In addition to the mast and the wing, your package will also contain the Propeller and the 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.

Stabilizer
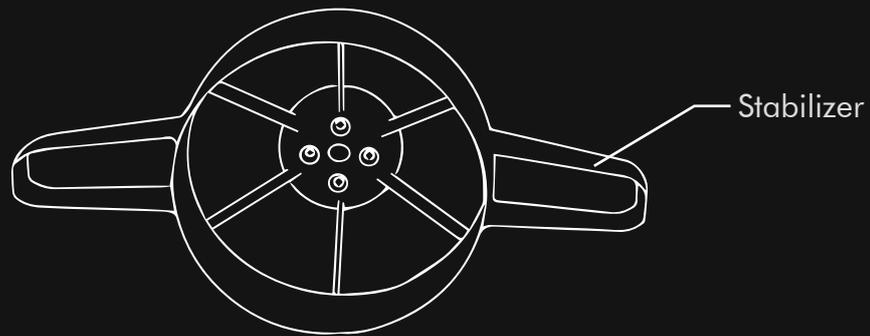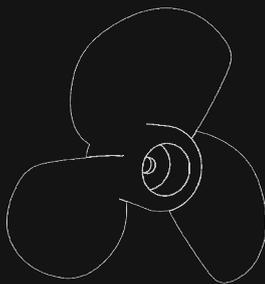
Prop Guard

Normal Propeller
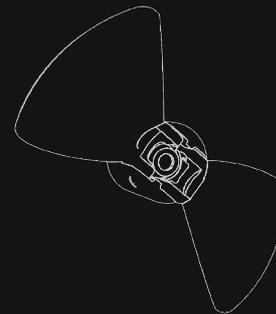
Folding Propeller

Stabilizer
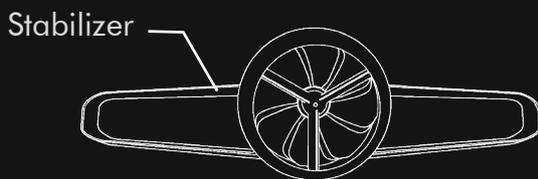
Prop Guard for Jet propulsion unit
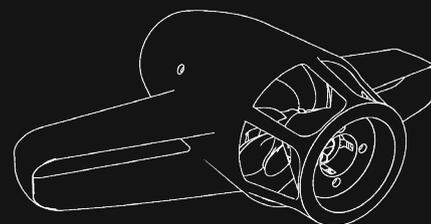
Jet Propulsion Unit

Remote Control

Wireless charging pad
and cable

Tef Gel

Tikal Tef-Gel

Reelx Anticorrosion Gel
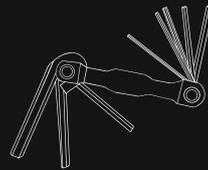
Hex key Set

Spacers X 2

3 - M5 X 16 screws
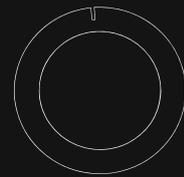
2 - M8 X 25 screws

1 - M8 X 20 screws

M5 washer x4
M8 washer x 5
M6 x 20 screws

Screw Set

Propeller Pin

## PACKAGE 2: Efoil Surfboard

The three available board sizes are:

EXPLORE
100 litres
The Carbon Fiber Reinforced
100L (5'5" - 165x70cm)
Beginners and Intermediate riders as
well as Heavier riders (> 90kg)
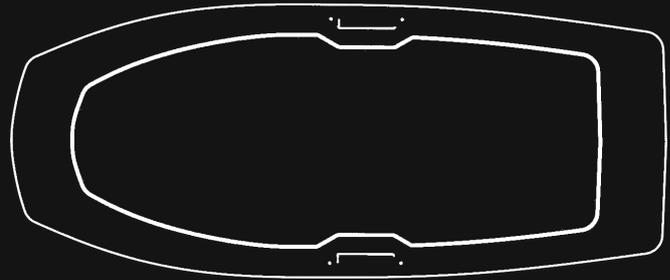
ELITE
75 litres
The Carbon Fiber Reinforced
75L (4'8" - 142x60cm)
Confirmed riders (up to 95kg)
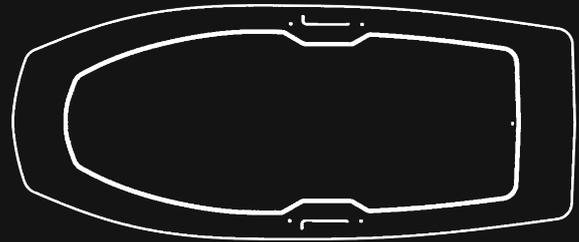
ABSOLUTE
50 litres
The Carbon Fiber Prepeg
50L (4'4" - 132x56cm)
Expert and Light riders (< 80kg)
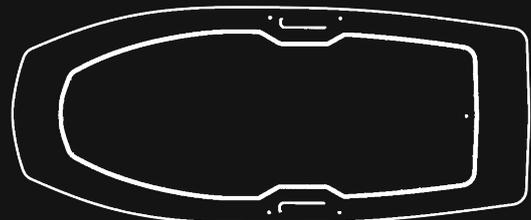
PACKAGE 3:

Battery

The 50Ah - Long range smart battery

Safety Locks

Magnetic Activation
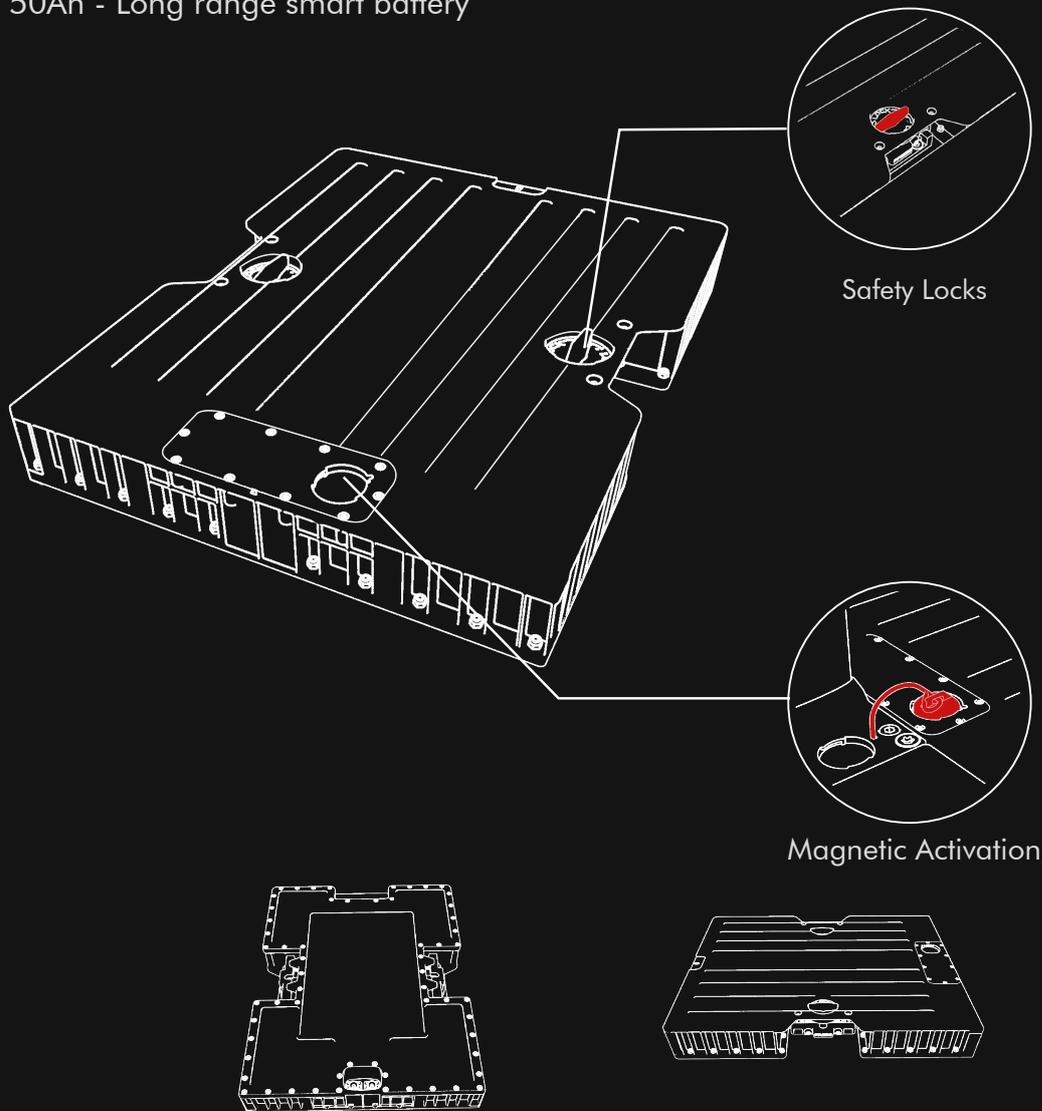
- Ride time upto 180min

- Fully waterproof (IP67)

- Sleek design with Dual seal protection and safety locks

- Bluetooth connectivity

- Battery status accessible via Mantafoils smartphone app

- Short circuit protection

- Temperature and discharge monitoring

Battery Charger

There are two types of battery chargers
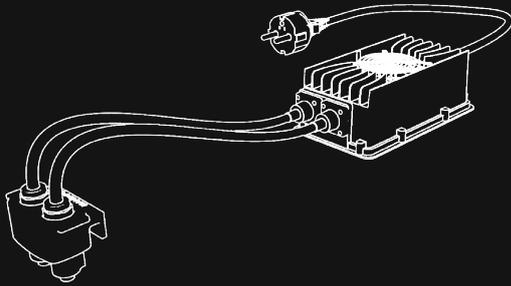
STANDARD CHARGER

The Standard Charger is 15 Amps and require approximately 4 hours of charging
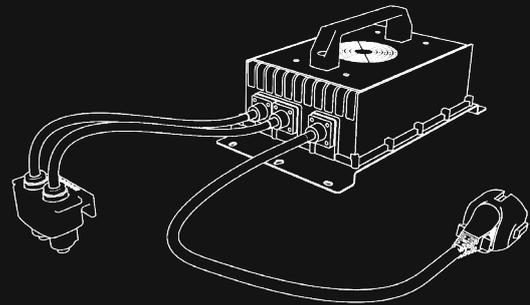
FAST CHARGER

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

The new Volt 4 has a very 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 - Assembly of propeller and prop guard.

Step 2 - Attachment of efoil to the board.

Step 3 - Assembly of wing to the efoil.

1- Assembly of propeller and prop guard

Tools Required: Hex Key, Spacers, M6 screws x1, M6 washer x1, M5 screws x4, M5 washers x4

This section is broken down into three subsections:

1. Placing the spacers on your motor.
2. Attaching the Prop guard to your efoil.
3. Attaching the propeller to your efoil.

⚠ IMPORTANT

When assembling the prop guard and propeller ensure your efoil is disconnected from the main battery power to prevent serious injuries.

PLACEMENT OF SPACERS ON YOUR MOTOR

1. The spacers are placed flat between the motor of your efoil and the prop guard.

These spacers have a tiny groove that act a guide point.

Guides must be opposite to each other.
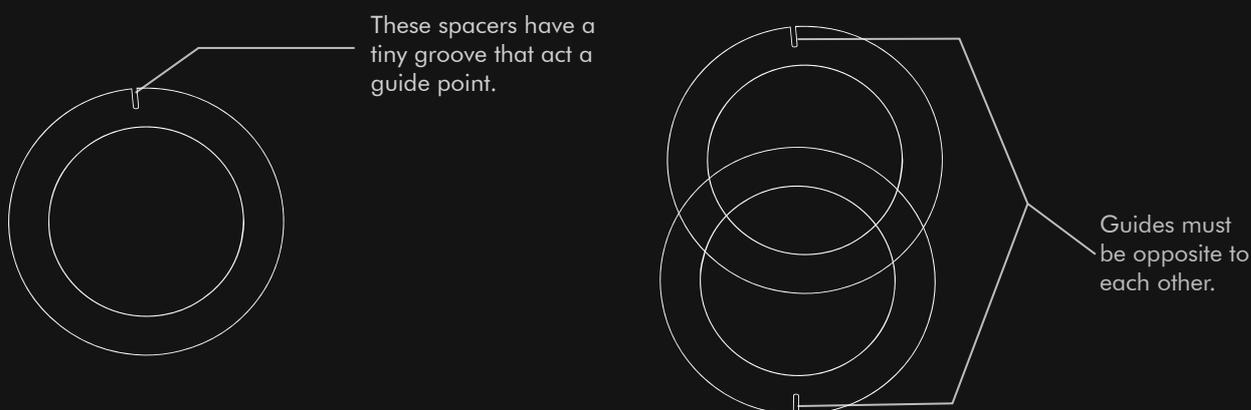
There are guide points on the spacers as shown in the figure above. Place both spacers flat on top of each other with guide points vertical and in the opposite direction of each other.

💡 Note: Rotating the spacers in the opposite directions changes angle of the stabilizer wing and the pitching power of the efoil.

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.
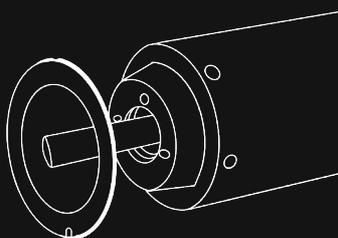
NORMAL & FOLDING PROPELLER (For Jet assembly instructions please skip to page no: 19)

ATTACHMENT OF PROP GUARD ON YOUR EFOIL

1 . On the prop guard, there is an arrow that indicates the positioning on the efoil (refer to figure 1). After the spacer has been placed on the motor, place the prop guard with the arrow pointing upward in the same direction as the mast (refer to figure 2).

On the back of the prop guard, the arrow indicates how it must be placed on the efoil

The arrow on the prop guard should point towards the board.

Figure 1

EFOIL MAST

PROP GUARD

STABILIZER
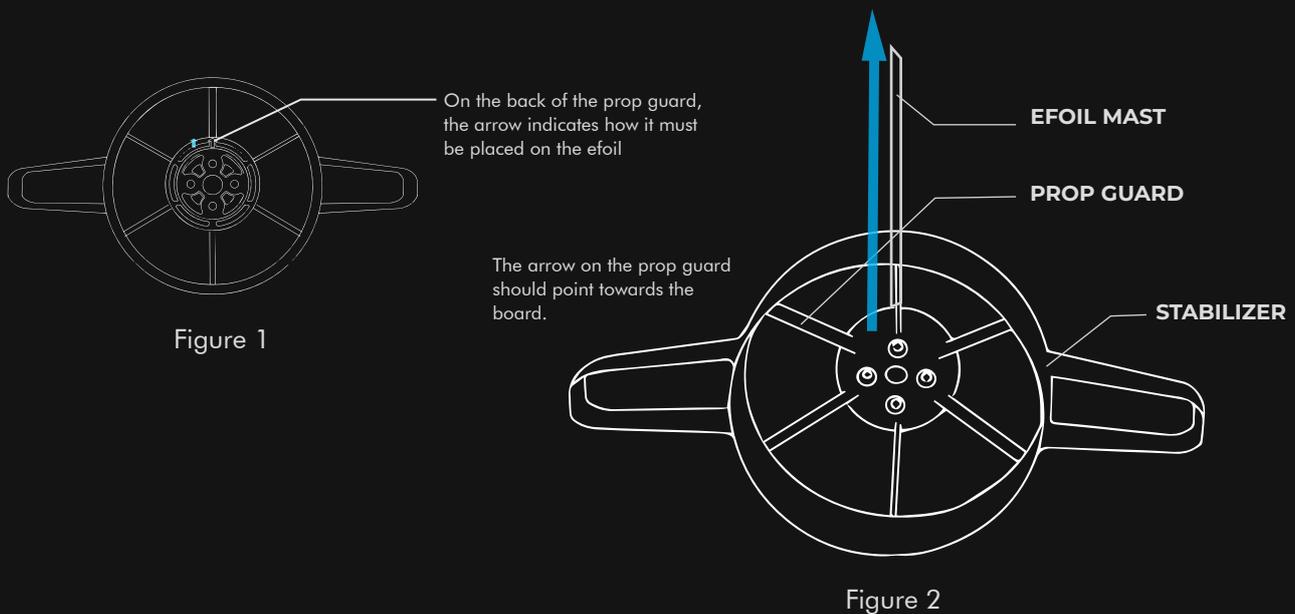
Figure 2

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

Your kit is provided with 4 screws and washers. Use these to attach the prop guard, 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 efoil.

ATTACHMENT OF PROPELLER TO YOUR EFOIL

⚠ IMPORTANT: The images in this section are only 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.

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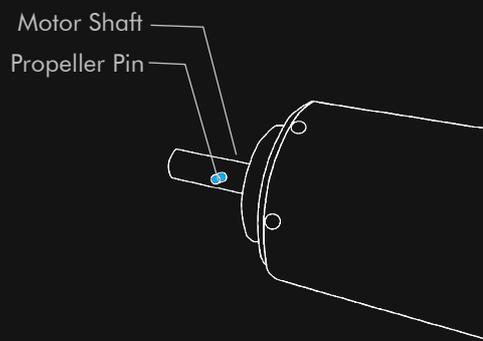
2. Behind the propeller, there are pin slots to engage the propeller pin. If there is sufficient distance between the prop guard and the propeller pin, engage the propeller on the deeper pin slot. If there is insufficient distance, engage the propeller in the shallow pin position.

Shallow Pin slot
Deeper Pin slot

Pin slot
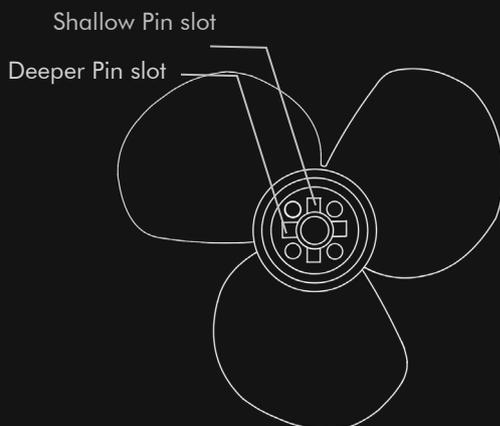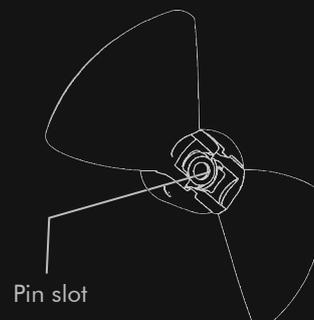
3 blades propeller   Folding propeller

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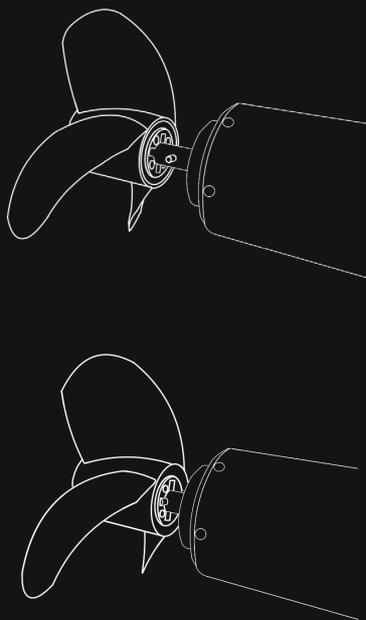
⚠ IMPORTANT

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, re-align the propeller and move into place again.

THE FINAL ASSEMBLY OF PROPELLER AND PROP GUARD

After instructions in Section I, II and III are completed, the final assembly of your efoil will follow as below:

Once the prop guard is attached to the efoil and the propeller is attached to the motor shaft with the pin engaged, place the washer first followed by the screw. Lock the propeller in place using an allen key.

The base of the propeller must NOT touch the base of the prop guard. If the propeller rotates with the motor freely and without any rubbing or metal scratching, it indicates a correct assembly and fitment. This motion can be tested by hand. Ensure the efoil 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 efoil.
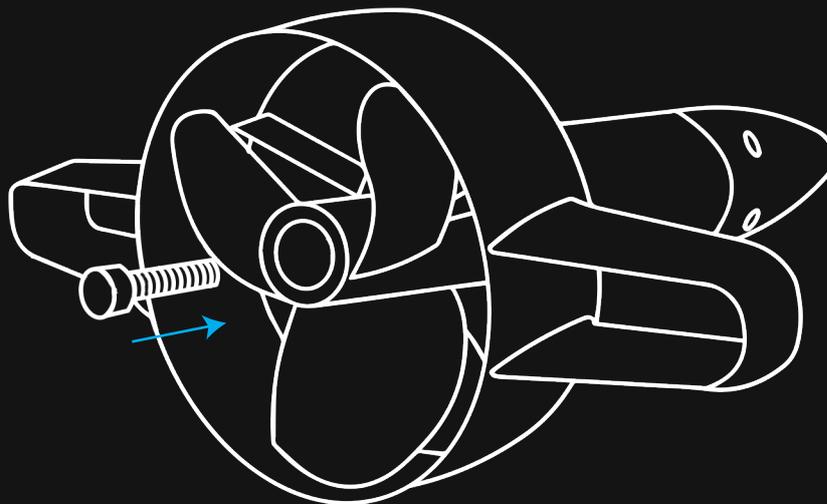
JET PROPULSION UNIT ASSEMBLY

1 . After the spacer has been placed on the efoil , place the prop guard in the same direction as mast.

2. Align the prop guard as depicted in the picture 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 with the screws provided.
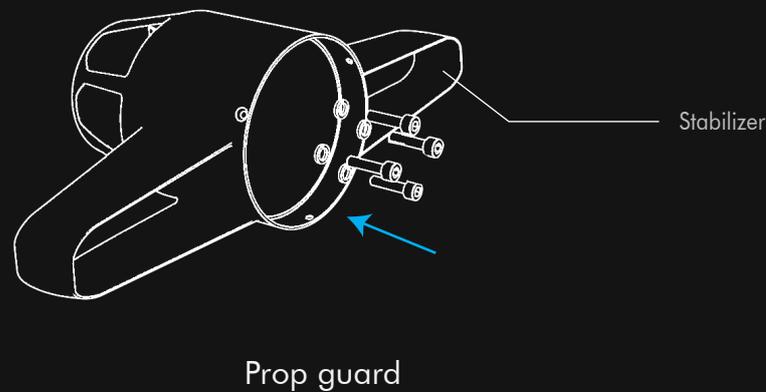
Stabilizer

Prop guard

💡 Note: It is crucial that the screws are secured tightly on the prop guard at all times to ensure long term use of your efoil.

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

Motor Shaft
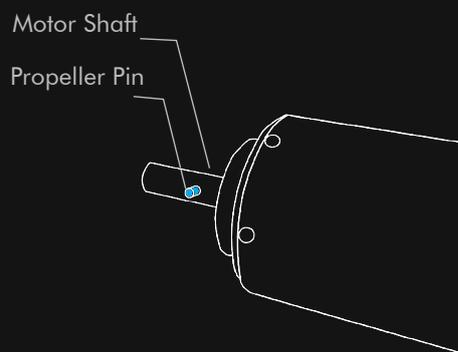
Propeller Pin

⚠️ IMPORTANT
The image above is merely to provide a clear view of the propeller assembly. DO NOT assemble the propeller without the prop guard at any instance on your efoil.

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

5. Once the prop guard is attached to the efoil and the propeller is attached to the motor shaft with the pin engaged, screw it with the screw provided.
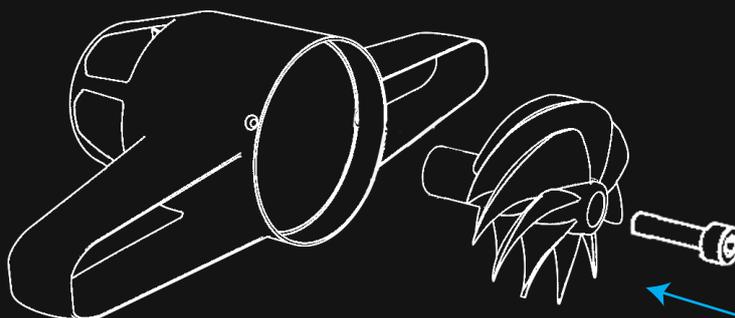
⚠ IMPORTANT

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, re-align the propeller and move into place again.

Jet Cone

Starter Blades
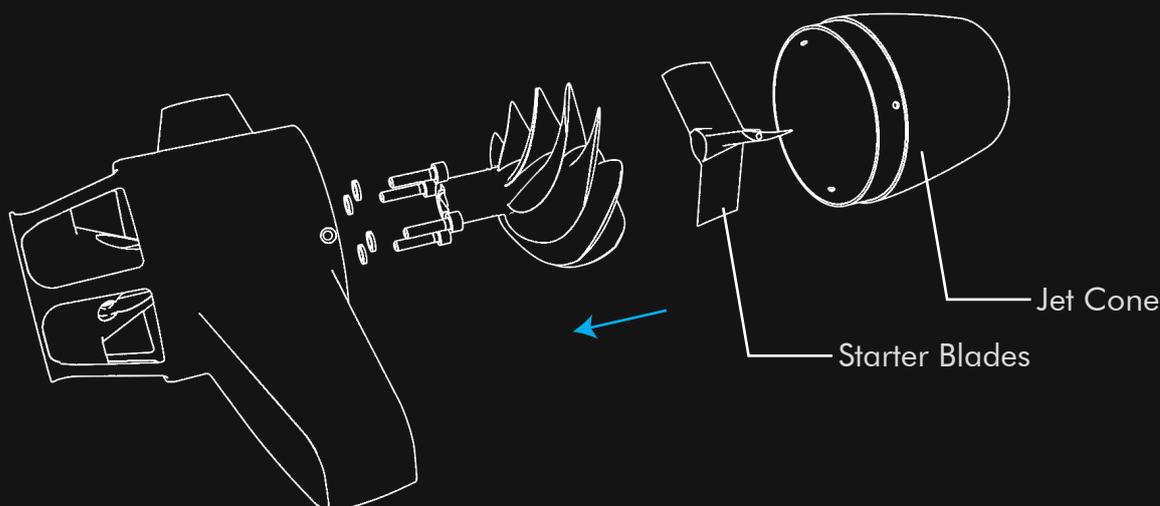
6. Place the cap to the prop guard as depicted in pic and screw it with the screws provided.
7. Use 3 x M3 screws to fix the jet cone in place.

2- Attachment of efoil to the board

Tools Required: Hex Key Set, Tef Gel , 4 - M8 washers , 4- M8 Screws

35 mm

Flip the board and place with the battery compartment facing up on the ground. The screws to attach the board and the foil come placed in their respective slots. The screw sizes for boards are M8x25.

Apply Tef gel into the screw threads and screw down foil in place 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 re-apply tef-gel every few weeks. This is to prevent corrosion of the aluminium surface in contact with the screws.
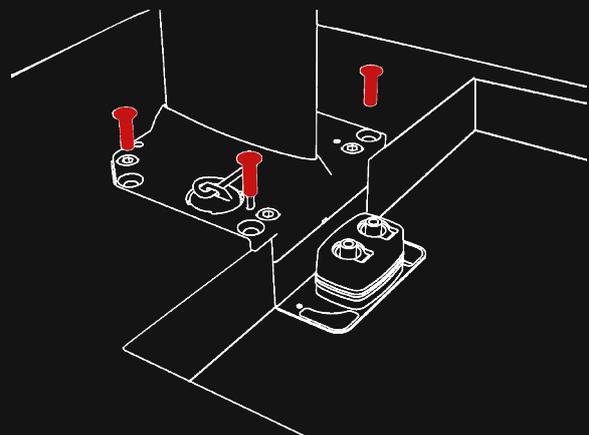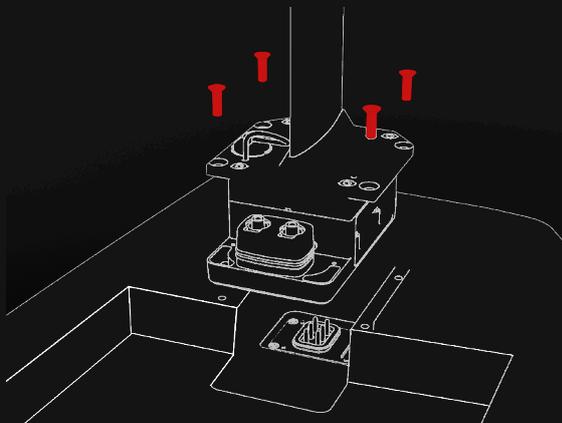
3- Assembly of wing to the efoil

Tools Required: 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 efoil parts.

The screws to attach the wing to your fuselage also come positioned in their respective screw slots. When assembling the wing on the efoil, 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.

M8 x 20mm   M8 x 25mm

Use allen key from the provided tool kit and tighten the wing to the efoil. The wing must not wobble on the efoil and must sit sturdy in place.
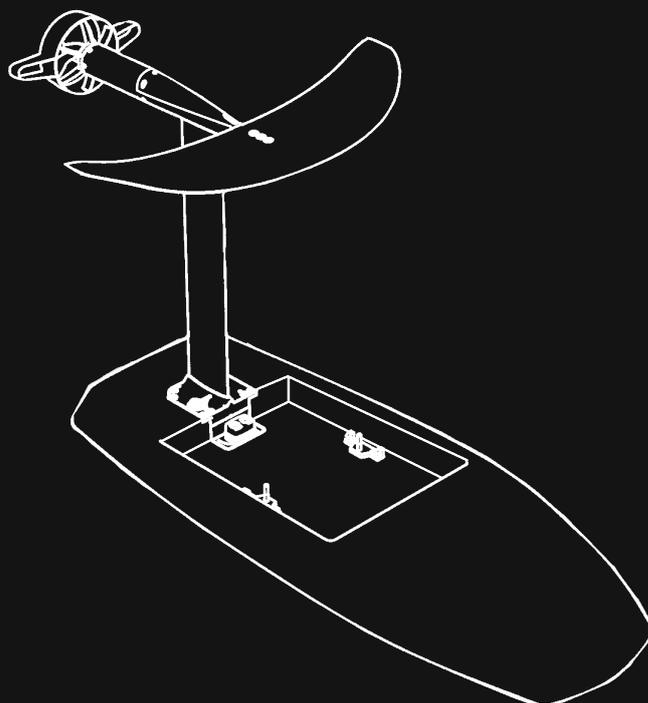
CHARGING

VOLT SMART BATTERY CHARGING

The Volt smart battery should ideally provide you with a ride time of 180 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.
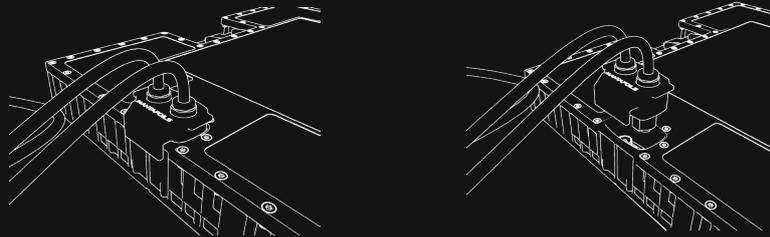
3. Plug in the charger cable to the socket. The typical charge time is 4 hours on standard charger and 2 hours on the fast charger.

The battery status is accessible via the Mantafoils smartphone application.

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

Fully charged

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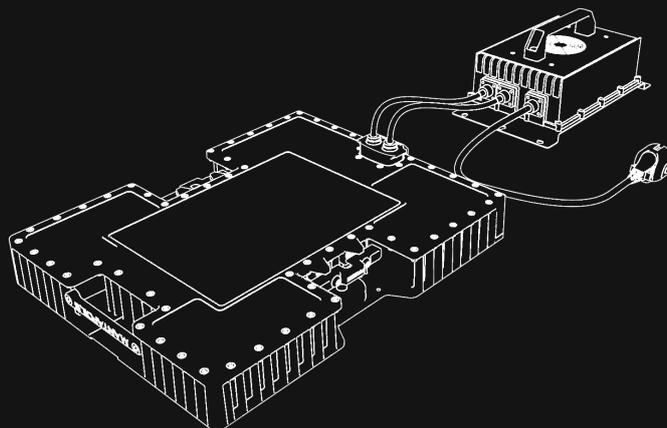
After charging or when not in use, it is recommended to keep the Volt Smart Battery stored in an optional fireproof case.

4. Once charged, first unplug the charger from wall socket then disconnect the battery from the charger.

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. Re-check if connectors are plugged in correctly.
Red-Green-Red - - -	Over Voltage	Switch off main power and re-try. If error still persists, contact sales@mantafoils.com
Red Green Red Green --	Ambient temperature too high.	Check if battery is kept for charging in a cool and ventilated space.
Green Red ----	Output Under Voltage	Ambient temperature is too high. Check if battery is kept for charging in a cool and ventilated space.
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

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The next step is installing the Volt smart battery into your board. Hold the battery by the handles and carefully lower it into the board cavity. Place the battery in the slot with the connectors pointing in the right direction. (Make sure connection caps are removed)

Press firmly around the connectors

Connectors of battery
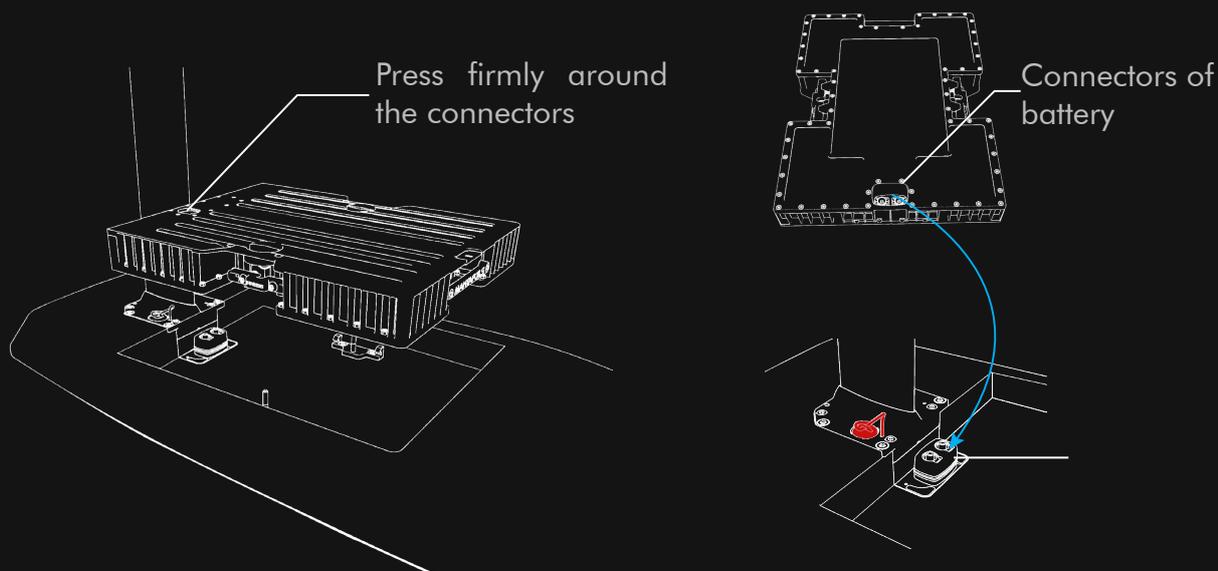
Press the battery near the connector and ensure it's flush with the bottom board surface before screwing it down.

Once the battery is in place, lock it into place by turning the safety locks on both sides. Ensure the locks are completely tightened.

TURN

Locks
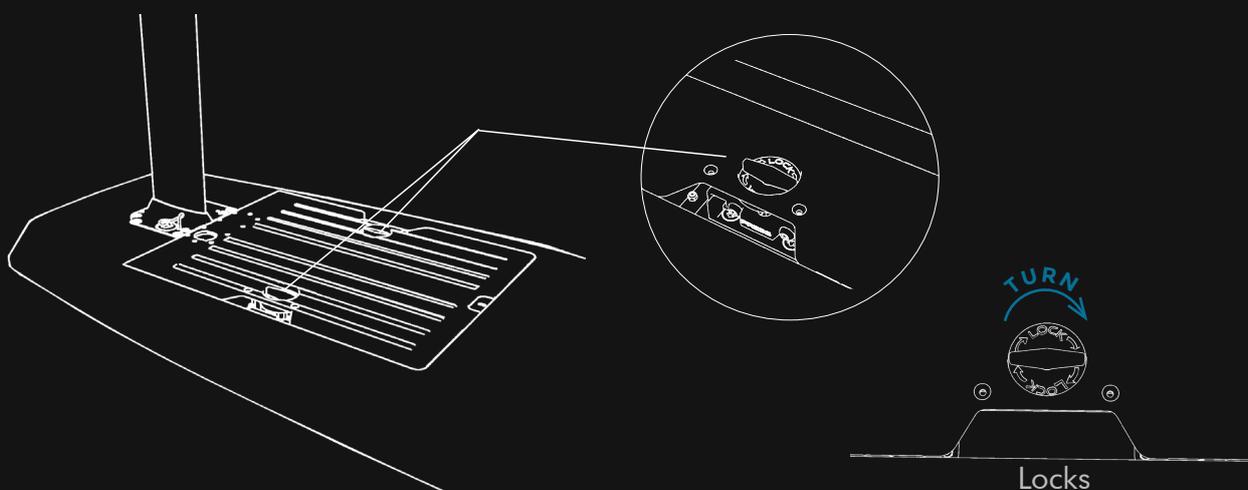
Connecting the magnet from the mast on to the battery will power on the efoil.

Magnetic activation
Place and turn 90°
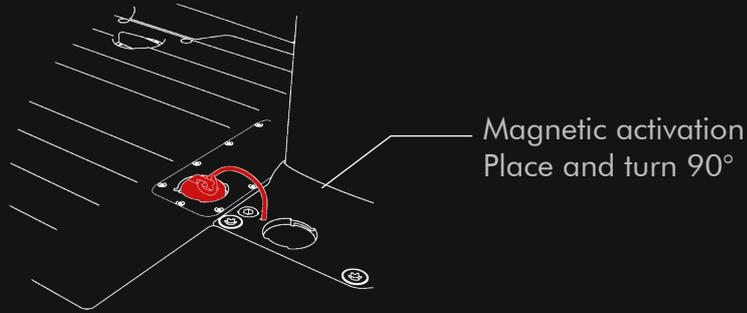
⚠ CAUTION
Do not ride the efoil unless the battery is locked into place properly.

RESTING AND CARRYING YOUR BOARD TO THE SHORE

Before each ride, check the seals condition prior to the ride. Also check that no screws are loose and the product is free of any damage. Ensure that all the connectors are tightened securely and the battery is locked in place. 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.
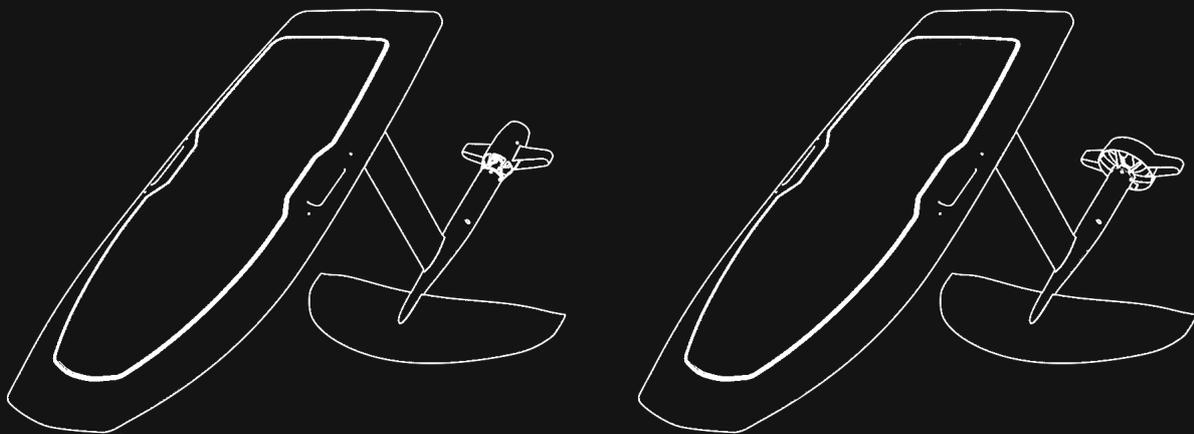
After ensuring your board has been assembled correctly with charged batteries, you are now ready to try out the board. The board can be tested with the remote controller outside the water.

💡 Note: DO NOT RUN MOTOR FOR MORE THAN 5 SECONDS OUTSIDE THE WATER.

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.

RIDING YOUR BOARD

29

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.

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 familiar 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, wipe outs 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 efoil. 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 similar to the technique used to carry the board to the water.

3. Once on the shore, remove the magnet from battery and this will power off the efoil. Make sure to place the magnet on the mast to prevent it from damage or loss.

Magnet on battery
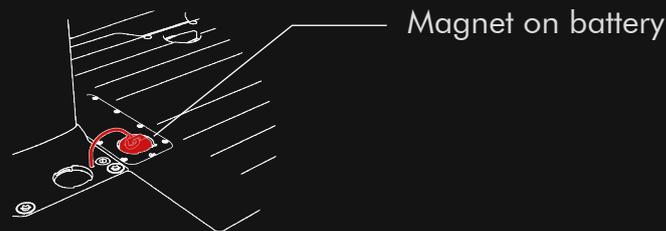
REMOVING THE BATTERY

1. Unscrew the safety locks from both sides to unlock the battery.

Locks
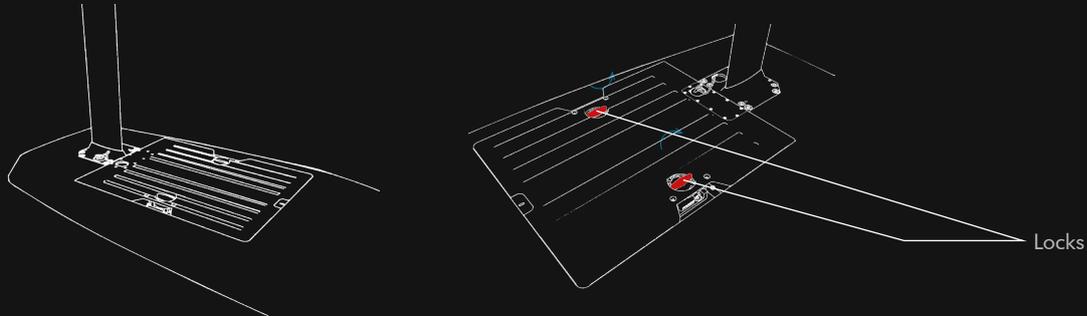
2. Pull the battery out of the board cavity by pulling and gently rocking it side to side.
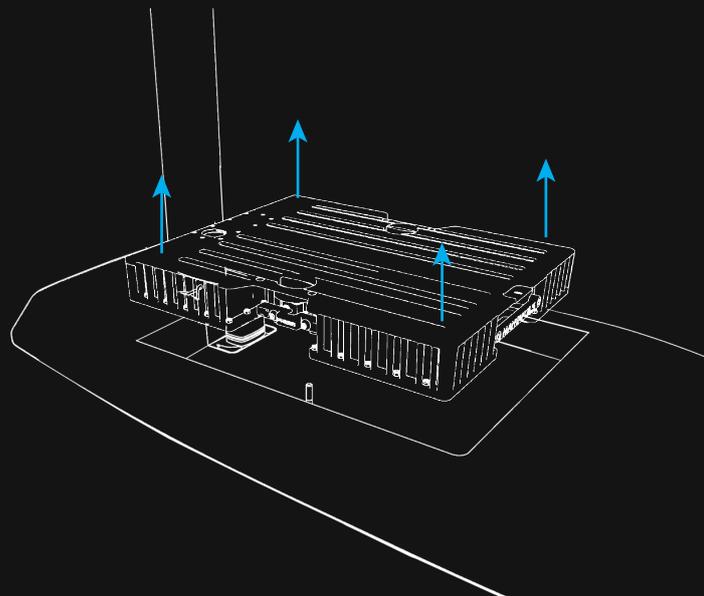
Pull by gently rocking it side to side
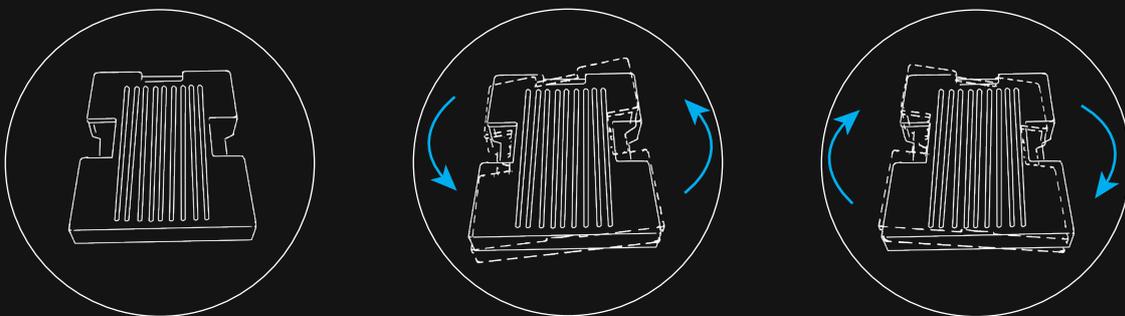
3. Make sure to pull the battery equally from both sides.

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 efoil board, spray down the board with pressurized fresh water to clean the board of any sand residue and salt water.

2. Rinse with pressure from the nose inlet.

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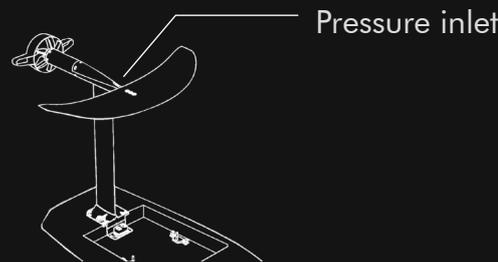
3. Check to see if any debris has invaded the battery compartment or connectors. Rinse it out and dry with a towel.

💡 Note: Ensure the battery compartment is dried completely before being stored away.

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

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

💡 Note: Do not spray water onto the terminals of the battery.

MAINTENANCE AND STORAGE

1. The efoil and Battery MUST be stored in a cool and dry place. An exceeded duration of exposure to UV rays and heat may lead to damages on the board and parts in addition to risk of fire. Additionally if purchased with kit, 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 re-apply tef-gel to the fuselage and wings screw slots.

3. Apply ReelX anticorrosion liquid on terminals at regular intervals (typically every 10 sessions if exposed to water, every 50 sessions if not exposed to water).

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

Download

Download

WELCOME

Once the logs access is enabled, open the Mantafoils application and click on the ride logs icon.

Wi-Fi

1. Access remote's menu/logs page and follow instructions on the display
2. Go to wifi settings on your phone and connect to "Mantafoils"
3. Come back to the app and click on the "Connect To The Remote" button bellow

CONNECT TO THE REMOTE

OR
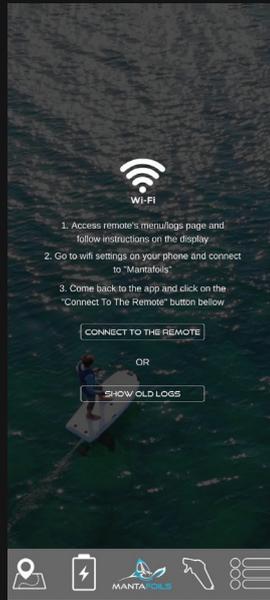
SHOW OLD LOGS

Connect to the Mantafoils wifi network and click 'connect to remote'. To view your ride logs click 'show old logs'.

CLOSE

SN	DATE	RIDE TIME	MILAGE	AVERAGE SPEED	MAX SPEED
9	15/07/22	00:09 Min	1.87 Km	14.18 Km/h	26.76 Km/h
8	15/07/22	00:12 Min	2.05 Km	11.04 Km/h	26.02 Km/h
7	15/07/22	00:02 Min	0.06 Km	4.46 Km/h	14.48 Km/h
6	15/07/22	00:00 Min	0.01 Km	1.51 Km/h	8.26 Km/h
5	Nill	Nill	0 Km	-1 Km/h	0 Km/h
4	Nill	Nill	0 Km	-1 Km/h	0 Km/h

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

UNITS: KM · KM/H · DEG C   CLOSE

SATELLITE: OFF

	SPEED	2.69 KM/H
	POWER	53 W
	BATTERY REMAINING	67 %
	TRIP	0.004 KM

00:00:00
▶ 1X
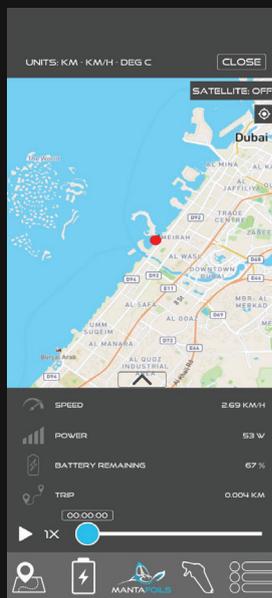
On this page, the ride can be replayed and view other data like the remaining battey percentage, the kilometers travelled and so on.
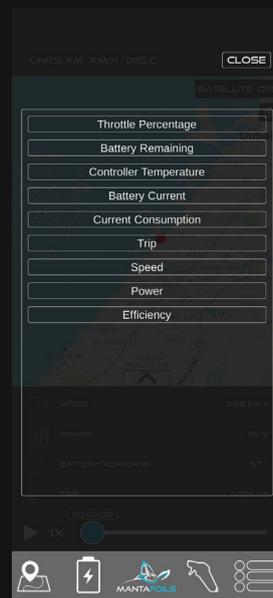
UNITS: KM · KM/H · DEG C   CLOSE

SATELLITE: OFF

Throttle Percentage
Battery Remaining
Controller Temperature
Battery Current
Current Consumption
Trip
Speed
Power
Efficiency

00:00:00
▶ 1X

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.

WELCOME

Before connecting to bluetooth do the following

1. Turn on Bluetooth in your mobile settings
2. Turn on location access in your mobile settings

Bluetooth®

RE SCAN   CLOSE

Previously connected batteries

MF20096
A4:C1:38:EF:7C:BD

MF bat 12S
A4:C1:38:13:F4:F4

MF20067
A4:C1:38:A4:6F:CF

New detected batteries

MF20085
A4:C1:38:5E:72:F8

MF20046
A4:C1:38:39:10:8E

28/25
A4:C1:37:10:1F:71

MF20074
A4:C1:38:27:DA:1E

MF20030
A4:C1:38:2E:04:C6

MF20084
A4:C1:38:47:38:F9

Click on the battery icon.

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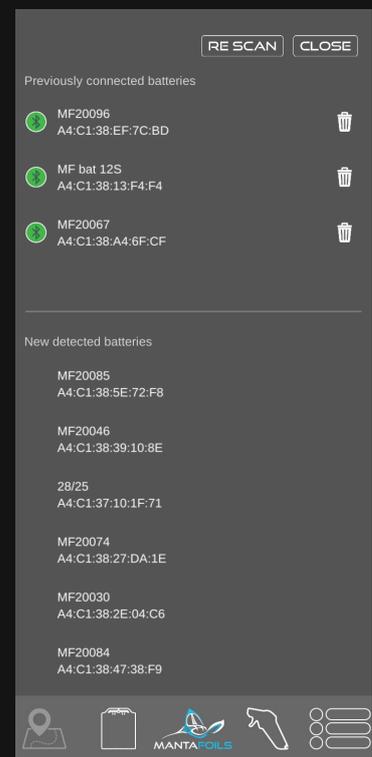
Within few seconds, the Battery should appear. Under 'new detected devices'. Click on the serial number of your battery to connect.

37

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

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WELCOME

USER MANUALS

TUTORIALS

VIDEOS

CONTACT US

Click on the list icon to access the Mantafoil Volt 4 user manuals, tutorial guides and contact information for queries or support.

Click on the list icon to access the Mantafoil Volt 4 user manuals, tutorial guides and contact information for queries or support.

39
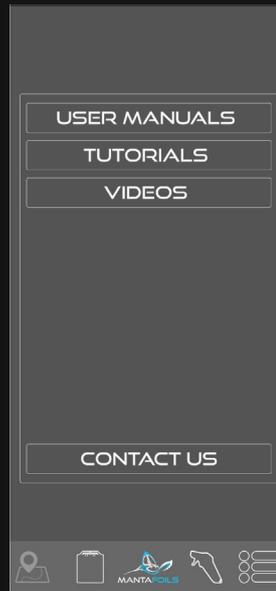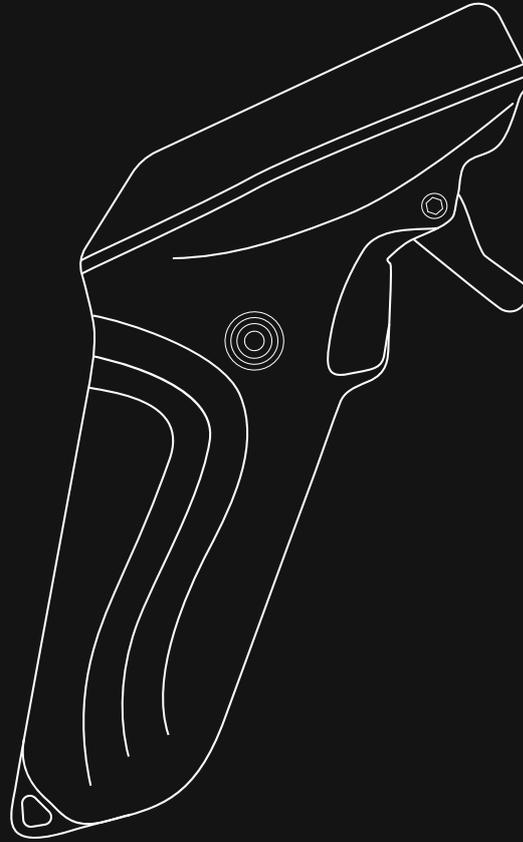
Configurable Display

Waterproof

Sunlight Readable

GPS Positioning Technology

Safety Lock

Cruise Control

Ride Logging

Wireless Charging

Power ON the remote by long pressing the 'O' button. When remote is powered ON, tthe homescreen will display the following:

1. The voltage of your efoil
2. The Remote Battery Charge
3. Speed of the efoil & throttle
4. Signal strength between efoil and remote
5. Remaining minutes - this indicates the remaining minutes of your ride time
6. Remaining Kilometer

The remote needs to be paired to your efoil to begin use.

Remote when powered on the first time.

Efoil battery voltage

The safety lock feature will be activated when receiver is paired

Short press the ' - ' button to start the ride.

Long press both the ' - ' and '+' for Menu

Single Press 'O' button while riding will change through different information displays

Long press the 'O' button for Power On/Off
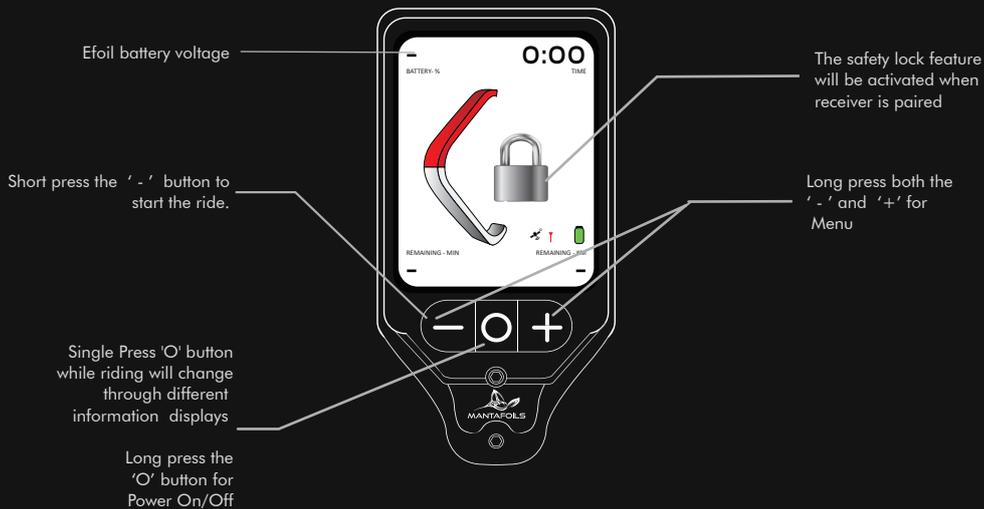
Remote after pairing to your efoil.

Throttle

Speed of efoil when you are riding

Remote battery charge

Rremaining minutes

The satellite icon number shows how many satellites are connected currently

The Signal Antenna colour indicates
○Red   - No Connection
○Black   - Connected
The bars show the strength of the connection
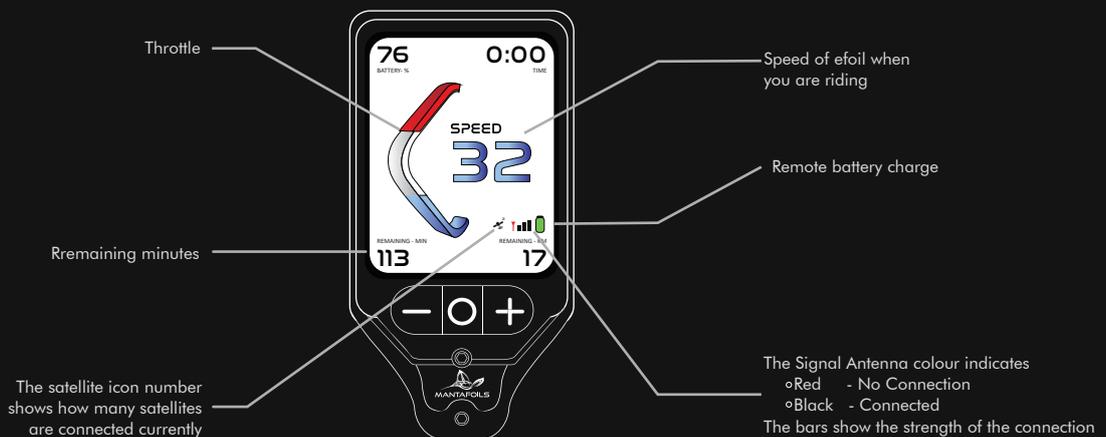
To begin using the remote, unlock the saftey lock by short press the '-' button once. the five second timeout will appear. To start your ride press the trigger before the countdown ends.

💡Note:
This safety lock feature is in place to lock the trigger to prevent any accidental efoil activation.

76
BATTERY- %

0:00
TIME

REMAINING - MIN
113

REMAINING - KM
17

MANTAFOILS

Step 1:
Short press the '-' button once

Step 2:
Press the trigger before the 5 second countdown ends

When remote is loaded, hold the '-' and '+' together for 3 seconds to enter the settings menu
Press the '-' or '+' button and navigate down until you arrive on 'Exit' option and press 'O' to exit from Menu.

In the menu:

1. The first page is used for pairing the remote with the efoil board.

Menu

- Pairing Efoil
- Trigger Cal
- Logs Upload
- Power Settings
- Regional Settings
- FW Update
- Reset System
- Exit

Single press '-' & '+'
to navigate through the
settings menu

Single press 'O' button
to select an option

Press and hold '-' & '+'
together to enter the
settings menu
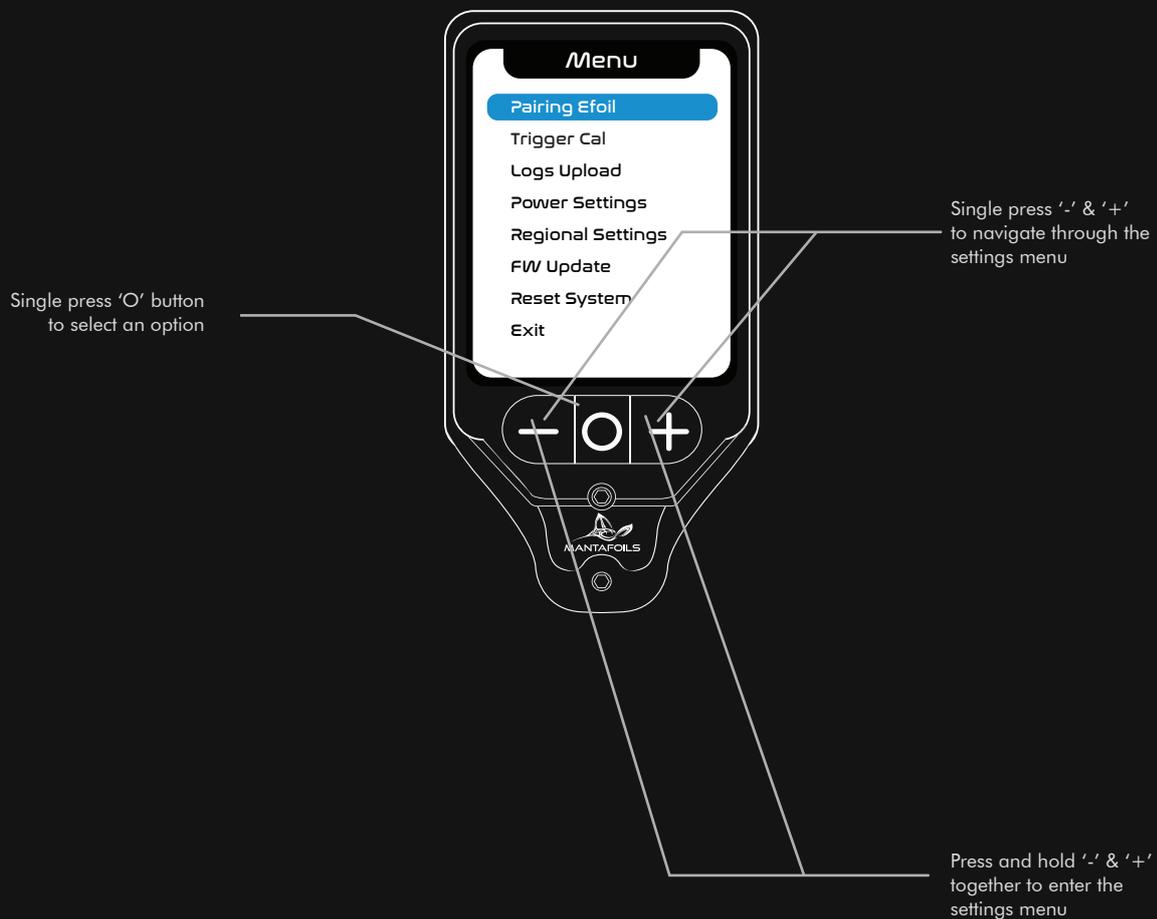
To connect your remote to the efoil:

- Press the 'O' button to enter into Pairing efoil page.

- Navigate to Pair Remote option using '+' or '-' button.

- Press 'O' to start the pairing mode.

- Power on the efoil by placing the magnet.

- The remote will turn off automatically once pairing is done.

Pairing Efoil

Pair Remote

Return

Pairing Efoil

Pair Remote

Return

Pairing...

Power ON the Foil

- Long press 'O' button and power the remote back on.

- Your remote is now paired with your efoil.

Note : After few seconds, the signal antenna colour will turn to black indicating that remote is connected to efoil and the bars indicate the strength of connection.

During your ride, your homescreen will displays the following information

1. Speed of the efoil
2. The efoil battery percentage
3. The Remote Battery percentage
4. Remaining kilometer
5. Remaining Minutes
6. Maximum speed
7. Clock
8. Elapsed min
9. Elapsed distance

On this page, use the '+' button to increase your cruise speed. Use the '-' button to decrease your cruise speed. Use the 'O' button to scroll through the first, second and third page.

Efoil Battery Charge

Clock

Press to go to the next page

The speed of the efoil

Long press the '-' button to reset the ride.

Press to reduce cruise speed

Press to increase cruise speed

76
BATTERY- %

0:00
TIME

SPEED
32

REMAINING - MIN
113

REMAINING - KM
17
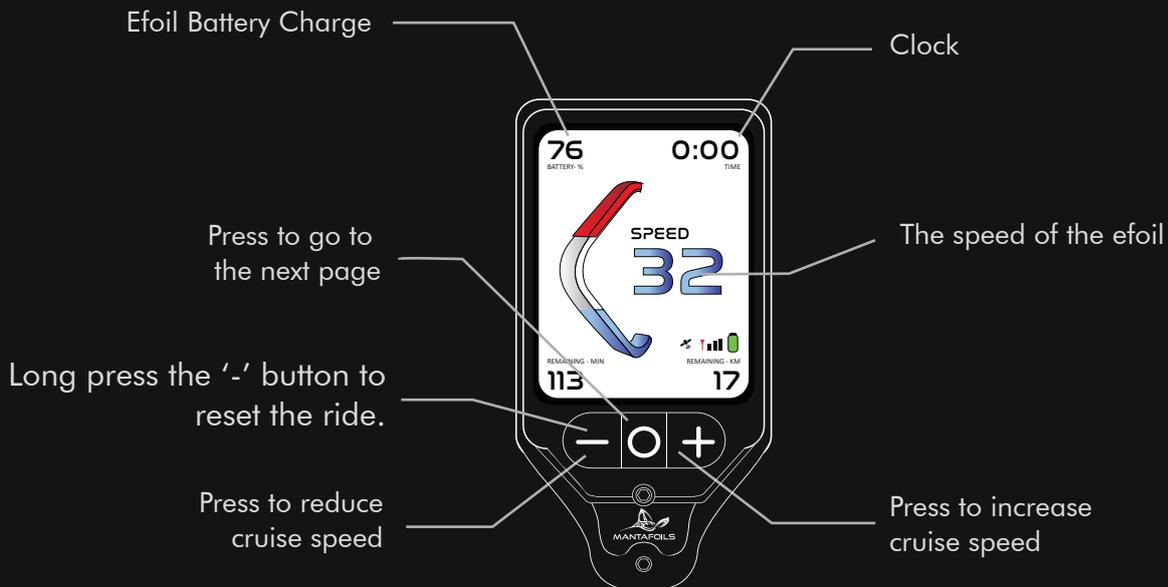
Long press 'O' to power off

Powering OFF

From the settings page, navigate to the trigger calibration page by pressing the '+ ' or '-' button until you arrive on 'Trigger' option and press 'O' to enter.

• On this page, press the 'O' button on the screen to begin sensor calibration.

Trigger Cal

Calibrate Trigger

Return

Trigger Cal

Calibrate Trigger

Return

Release trigger
not pressed

1. On this page, ensure the trigger is not pressed

Trigger Cal

Calibrate Trigger

Return

Press Trigger
Fully
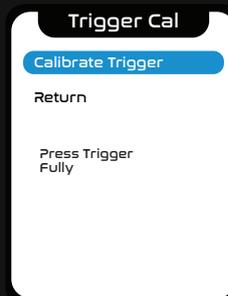
2. Press and hold the trigger for 3 seconds or until the screen changes.

Calibrate Trigger

Return

Trigger call...

S Full:0
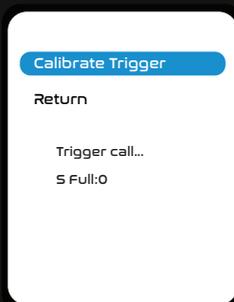
3. When you see this screen. Release the trigger completely.

Calibrate Trigger

Return

Done...
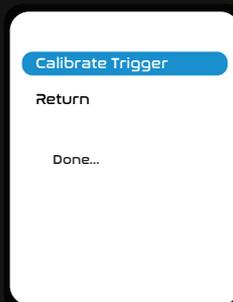
4. Your trigger calibration has completed.

Calibrate Trigger

Return

Done...

Throttle : 0
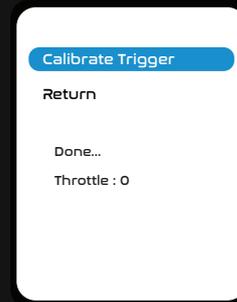
5. Test the calibration of your trigger on this screen.

Once completed, Pressing any button on the remote will restart the remote indicating that the changes have been saved.

From the settings page, navigate to the power setting page by pressing the '+ ' or '-' button and enter the power settings page by pressing 'O'.

Navigate to Power limit option using '+' or '-' button and enter the power limit page by pressing 'O'.

- Navigate to Set limit option using '+' or '-' button. Press the 'O' button to set the power limit to the desired value. The values change in increments of 10.
- Once set, navigate to the return option by using '-' or '+' buttons and navigate back to the same page to ensure that the desired value is saved.

☀ Note:
This feature is designed to make the ride easily controlable for amateur and young riders. It limits the maximum power output.
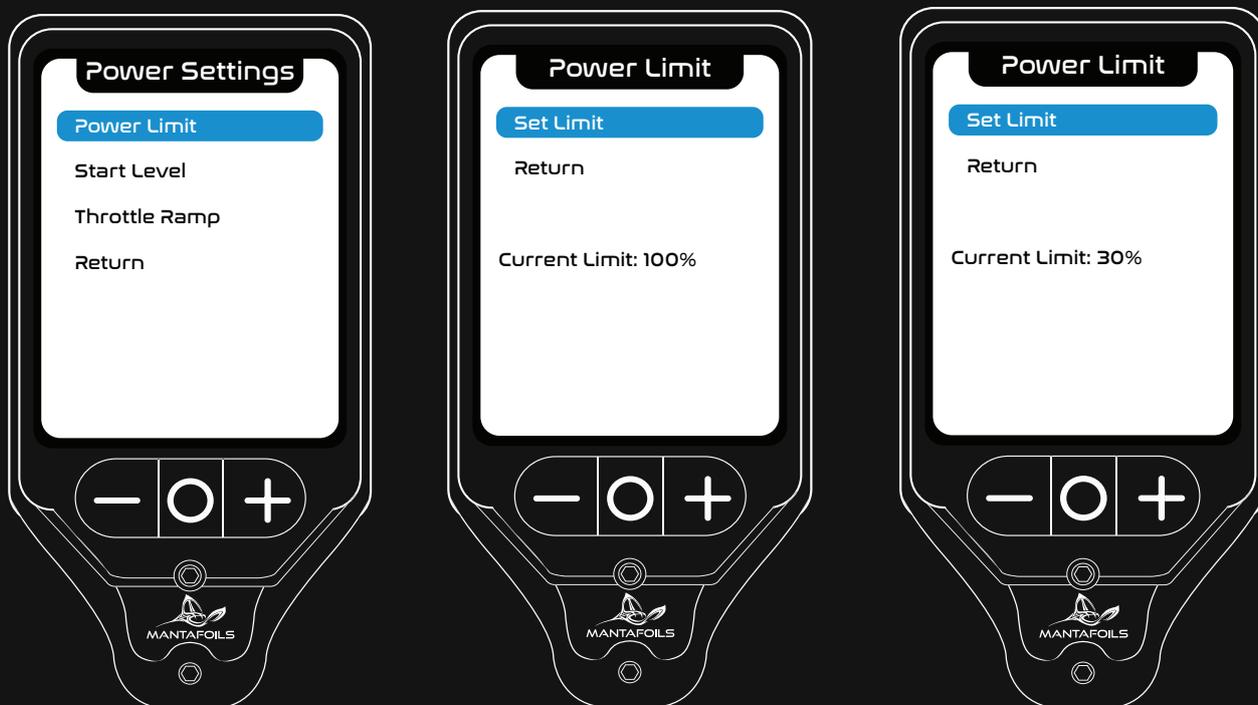
From the settings page, navigate to the power settings page by pressing the '+ ' or '-' button and enter the power settings page by pressing 'O'.

Navigate to Start Level option using '+' or '-' button and enter the Start Level page by pressing 'O'.

- Throttle start is the maximum power of the efoil when the trigger is pressed at the startup.
- This feature is included to avoid unexpected power bursts when starting the ride.
- Press the 'O' button to set the throttle start to the desired value. The values change in increments of 5.
- Once set, navigate to a different page by using '-' or '+' buttons and navigate back to the same page to ensure that the desired value is saved.

Start Level

Set Level

Return

Current Start: 50%
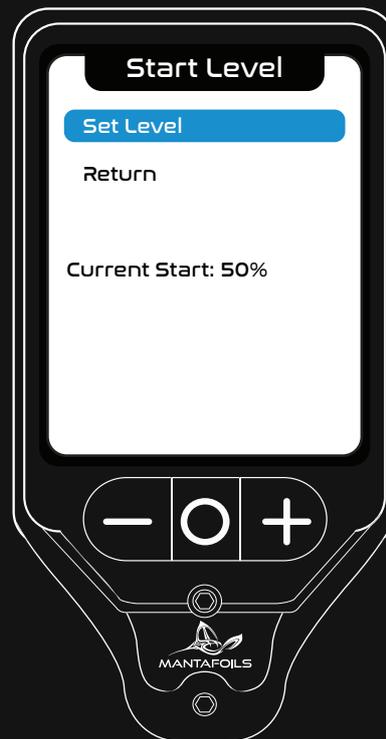
💡 Note: 100% level wiill disable the lock.

From the settings page, navigate to the power settings page by pressing the '+ ' or '-' button and enter the power settings page by pressing 'O'.

Navigate to Throttle Ramp option using '+' or '-' button and enter the Throttle Ramp page by pressing 'O'.

- Throttle ramp is sensitivity of the acceleration of the efoil.
- This value controls how quickly the power output ramps up or down between different power levels.
- On this page, press the 'O' button to change the options. The value changes from very slow, slow, normal, fast and very fast.
- Once set, navigate to a different page by using '-' or '+' buttons and navigate back to the same page to ensure that the desired value is saved.

From the settings page, navigate to the logs upload page by pressing the '+ ' or '-' button and enter the logs upload page by pressing 'O'.

- Navigate to Access Logs option by pressing '+' or '-' .
- Press the 'O' button to toggle the system ON and OFF.
- All travel logs are recorded by default.
- Setting it to 'ON' will activate transfer the logs data to the phone application.
- Setting it to 'OFF' will deactivate the transfer of logs data to the phone application and restart the remote.
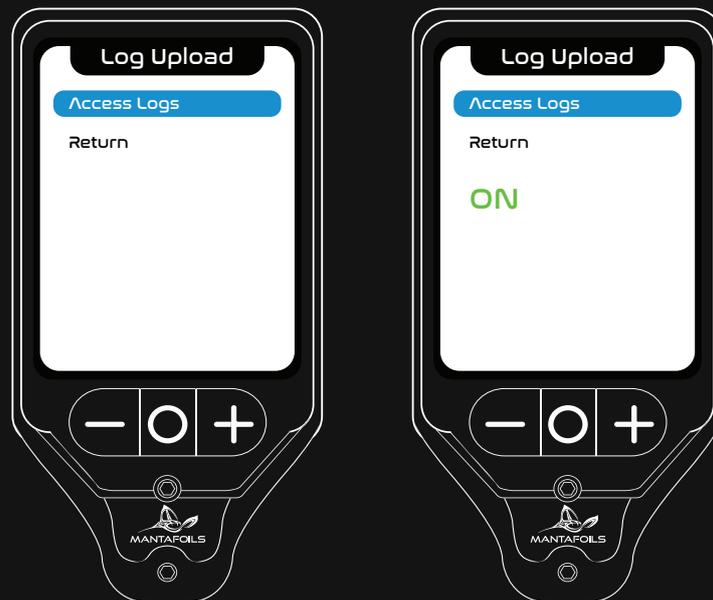
From the settings page, navigate to the regional settings page by pressing the '+ ' or '-'
button and enter the regional settings page by pressing 'O'.

Navigate to Units page using '+' or '-' button and enter the units page by pressing 'O'.

- The available Units are:
    1. The SI units : kilometer/hour
    2. The US units : miles/ hour
    3. The nautical units: knots/hour

Keep pressing the 'O' button on this page to change the units on your remote.
Press the '-' or '+' to navigate the return option and press 'O' to go back. The changes are
saved automatically.

Units	Units	Units
Set Units	Set Units	Set Units
Return	Return	Return
SI: Km/h-Km-DegC	US: Mph-Miles-DegF	Water: kts-Km-DegC

From the settings page, navigate to the regional settings page by pressing the '+ ' or '-' button and enter the regional settings page by pressing 'O'.

- Navigate to Language page using '+' or '-' button and enter the Language page by pressing 'O'.
- Navigate to Set language option using '+' or '-' button.
- Press the 'O' button on this page to change the language on your remote.
- Press the '-' or '+' to navigate the return option and press 'O' to go back.

The changes are saved automatically.
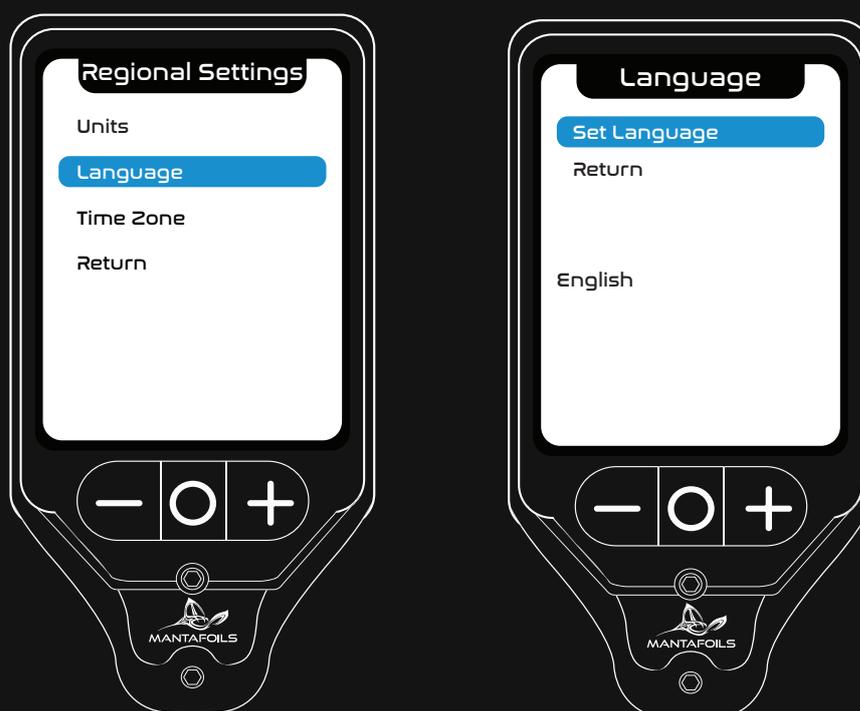
From the settings page, navigate to the regional settings page by pressing the '+ ' or '-' button and enter the regional settings page by pressing 'O'.

- Navigate to Time Zone option using '+' or '-' button and enter the Time Zone page by pressing 'O'.
- Navigate to Set Time Zone option using '+' or '-' button.
- Press the 'O' button on this page to change the Time Zone on your remote.
- Press the '-' or '+' to navigate the return option and press 'O' to go back.

The changes are saved automatically.
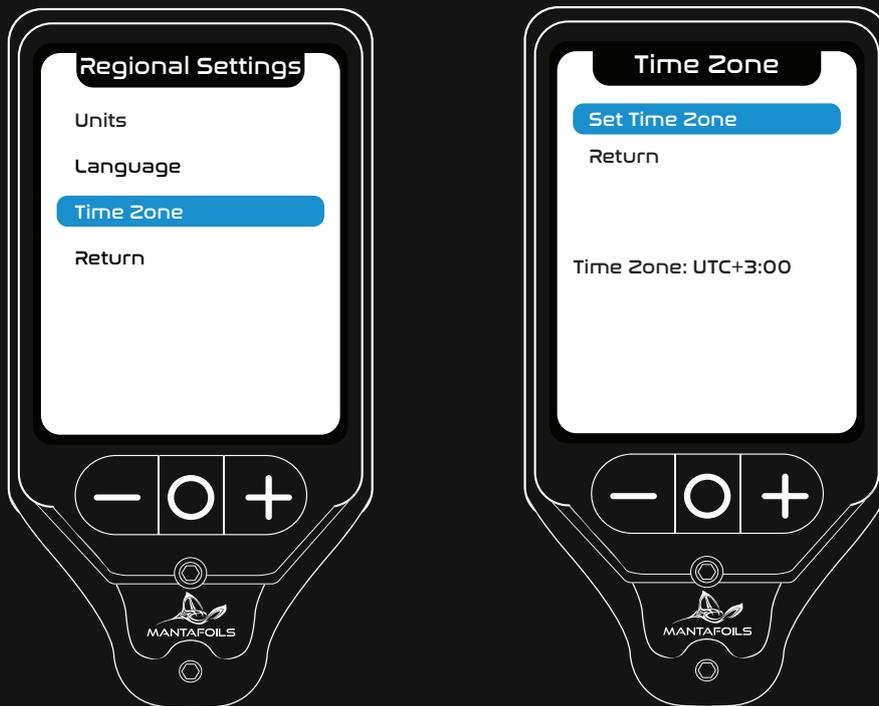
From the settings page, navigate to the firmware update page by pressing the '+ ' button.

- Make sure the remote is paired to your efoil and efoil is on (For this, read the instructions on pairing your remote with the board).
- Open the MantaFoil application on your mobile phone.

Click on the Remote Control Icon

Click on the latest firmware version
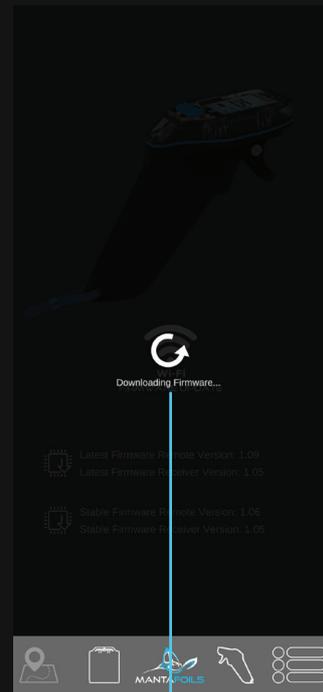
Wait for the download to finish

☀ Note: Make sure to install volt 4 remote firmware. Current app does not support volt 4 at the time of release. Future app will have dedicated support of volt 4 devices.

After the firmware update is downloaded on your mobile application, navigate to the firmware update page of your remote.

- Press the 'O' button on the remote to activate the MantaFoil wifi network.
- Your remote will read 'Efoil 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
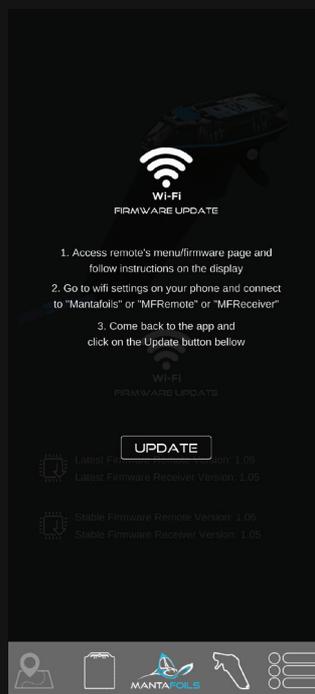
Once the installation is complete, your remote will read 'Lost Connection' and will automatically restart. This indicates that the update is successfully completed.

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

From the settings page, navigate to the reset system page by pressing the '+ ' or '-' button and enter the reset system page by pressing 'O'.

- Navigate to Factory reset option and press the 'O' button on the remote to reset the system.
- Your remote will automatically restart after the re-setting is done.

WELCOME

Once the logs access is enabled, open the Mantafoils application and click on the ride logs icon.

Wi-Fi

1. Access remote's menu/logs page and follow instructions on the display

2. Go to wifi settings on your phone and connect to "Mantafoils"

3. Come back to the app and click on the "Connect To The Remote" button bellow

CONNECT TO THE REMOTE

OR

SHOW OLD LOGS

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

CLOSE					
SN	DATE	RIDE TIME	MILAGE	AVERAGE SPEED	MAX SPEED
9	15/07/22	00:09 Min	1.87 Km	14.18 Km/h	26.76 Km/h
8	15/07/22	00:12 Min	2.05 Km	11.04 Km/h	26.02 Km/h
7	15/07/22	00:02 Min	0.06 Km	4.46 Km/h	14.48 Km/h
6	15/07/22	00:00 Min	0.01 Km	1.51 Km/h	8.26 Km/h
5	Nill	Nill	0 Km	-1 Km/h	0 Km/h
4	Nill	Nill	0 Km	-1 Km/h	0 Km/h

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

UNITS: KM · KM/H · DEG C   CLOSE

SATELLITE: OFF

Dubai

SPEED   2.69 KM/H
POWER   53 W
BATTERY REMAINING   67 %
TRIP   0.004 KM

00:00:00

▶ 1X
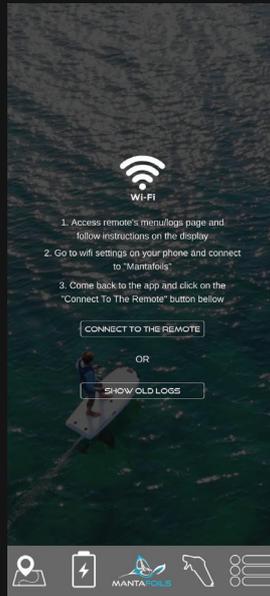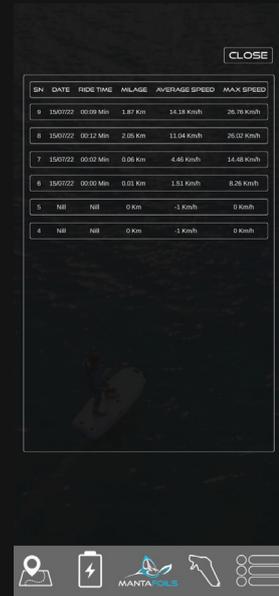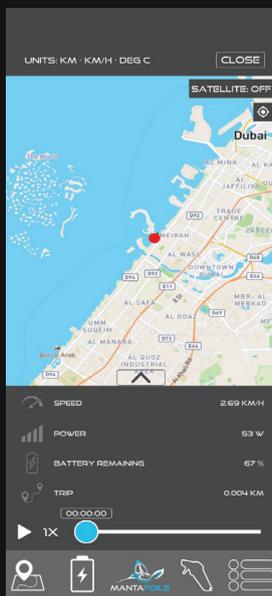
Once the logs access is enabled, open the Mantafoils application and click on the ride logs icon to replay your ride.
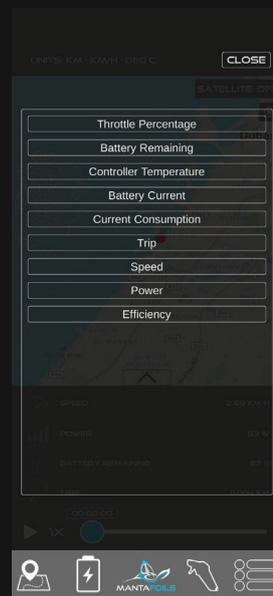
UNITS: KM · KM/H · DEG C   CLOSE

SATELLITE: OFF

Throttle Percentage
Battery Remaining
Controller Temperature
Battery Current
Current Consumption
Trip
Speed
Power
Efficiency

00:00:00

▶ 1X

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

The MantaFoil remote is charged wirelessly. The wireless charger and cable are provided in your efoil Kit.

- To charge the remote, plug in the wireless charger.
- Place the remote on the wireless charging pad.
- The blue light on the remote and the pad indicate charging in progress.
- The blue light on the remote will turn off once it is fully charged.
- The remote charge must be at least 20% to be able to use for riding.

Charge time: 2 hours (when less than 10%).
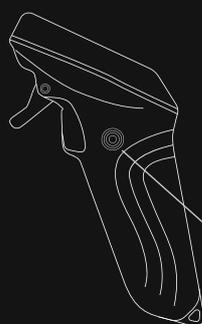
Keep this side towards the wireless charging pad.
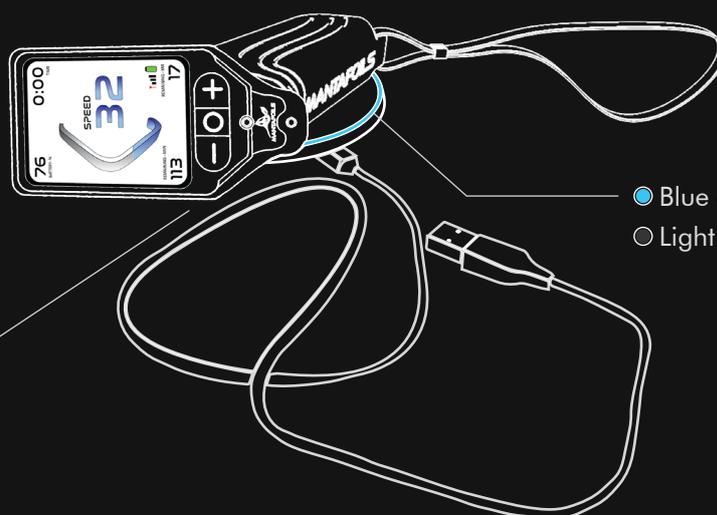
🔵 Blue colour - Charging
⚪ Light off   - Charged

Place the remote on the pad as shown in the picture

To hardware reset your remote, place a magnet on the side of the bottom right corner of the remote screen. The remote will power off. You can then restart your remote. This feature is useful in the unlikely event of a software hang or frozen screen.

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Common Issues	Suggested Solution
Remote not Pairing	- Your Efoil may not be powered on. Check Battery Status (Refer to efoil user manual) and re-try. - Ensure the data cable connectors are connected securely and no water has entered in. If you notice traces of water, leave cables out for drying and re-try. - Ensure the lid of your board is closed properly.
Remote Screen is stuck	- Hardware reset your remote.
Remote does not turn ON	- Ensure your remote is charged and re-try.
Cannot connect to Mantafoil wifi for firmware update	- Read the firmware update section of the user manual. Follow instructions and try again.
Remote not Charging	- Ensure the instructions in the user manual section remote charging are followed.
Remote Firmware not updating	- Contact Mantafoil Support team.
Water inside Remote	- In the unlikely event of water inside the remote, discontinue use of the remote and contact Mantafoil Support team.

If any issues persist with your remote, contact mantafoils support team at sales@mantafoils.com

FIRST 6 MONTH SERVICE

Inspected

☐ Board ☐ Mast ☐ Fuselage ☐ Propeller ☐ Remote

☐ Wings ☐ Battery ☐ Connector

Replaced / Repaired

☐ Seals ☐ Oil ☐ Mast ☐ Fuselage ☐ Motor Controller

☐ Receiver ☐ Remote ☐ Propeller ☐ Anode ☐ Propeller Duct

Repair work details

Efoil Hours of use

City / Country

Name of Technician

Authorized Repair Centre

Signature of Technician

Date

MANTA FOILS
FUTURE IS FOILING

Board S/N [   ]   Mast S/N [   ]

Battery S/N [   ]   Remote S/N [   ]

Time of Service

[**100HRS / 12M**] [200HRS / 24M] [300HRS / 36M] [HRS /   M] [HRS /   M]

Inspected

☐ Board   ☐ Mast   ☐ Fuselage   ☐ Propeller   ☐ Remote

☐ Wings   ☐ Battery   ☐ Connector

Replaced / Repaired

☐ Seals   ☐ Oil   ☐ Mast   ☐ Fuselage   ☐ Motor Controller

☐ Receiver ☐ Remote   ☐ Propeller ☐ Anode   ☐ Propeller Duct

Repair work details

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Efoil Hours of use [   ]   City / Country [   ]

Name of Technician [   ]

Authorized Repair Centre [   ]

Signature of Technician [   ]   Date [   ]

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Board S/N [ ] **Mast S/N** [ ]

Battery S/N [ ] **Remote S/N** [ ]

Time of Service

[100HRS / 12M] [**200HRS / 24M**] [300HRS / 36M] [HRS / M] [HRS / M]

Inspected

☐ Board ☐ Mast ☐ Fuselage ☐ Propeller ☐ Remote

☐ Wings ☐ Battery ☐ Connector

Replaced / Repaired

☐ Seals ☐ Oil ☐ Mast ☐ Fuselage ☐ Motor Controller

☐ Receiver ☐ Remote ☐ Propeller ☐ Anode ☐ Propeller Duct

Repair work details

[--]

Efoil Hours of use [ ] **City / Country** [ ]

Name of Technician [ ]

Authorized Repair Centre [ ]

Signature of Technician [ ] **Date** [ ]

Maintenance Schedule

Board S/N [_____]   Mast S/N [_____]

Battery S/N [_____]   Remote S/N [_____]

Time of Service

[100HRS / 12M] [200HRS / 24M] **[300HRS / 36M]** [HRS / M] [HRS / M]

Inspected

☐ Board   ☐ Mast   ☐ Fuselage   ☐ Propeller   ☐ Remote

☐ Wings   ☐ Battery   ☐ Connector

Replaced / Repaired

☐ Seals   ☐ Oil   ☐ Mast   ☐ Fuselage   ☐ Motor Controller

☐ Receiver   ☐ Remote   ☐ Propeller   ☐ Anode   ☐ Propeller Duct

Repair work details

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Efoil Hours of use [_____]   City / Country [_____]

Name of Technician [_____]

Authorized Repair Centre [_____]

Signature of Technician [_____]   [_____]

Board S/N [   ]   **Mast S/N** [   ]

Battery S/N [   ]   **Remote S/N** [   ]

Time of Service

[100HRS / 12M] [200HRS / 24M] [300HRS / 36M] [HRS /   M] [HRS /   M]

Inspected

☐ Board   ☐ Mast   ☐ Fuselage   ☐ Propeller   ☐ Remote

☐ Wings   ☐ Battery   ☐ Connector

Replaced / Repaired

☐ Seals   ☐ Oil   ☐ Mast   ☐ Fuselage   ☐ Motor Controller

☐ Receiver   ☐ Remote   ☐ Propeller   ☐ Anode   ☐ Propeller Duct

Repair work details

[_____
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_____]

Efoil Hours of use [   ]   **City / Country** [   ]

Name of Technician [   ]

Authorized Repair Centre [   ]

Signature of Technician [   ]   [   ]

Board S/N

Mast S/N

Battery S/N

Remote S/N

Time of Service

| 100HRS / 12M | 200HRS / 24M | 300HRS / 36M | HRS / M | HRS / M |

Inspected

☐ Board   ☐ Mast   ☐ Fuselage   ☐ Propeller   ☐ Remote

☐ Wings   ☐ Battery   ☐ Connector

Replaced / Repaired

☐ Seals   ☐ Oil   ☐ Mast   ☐ Fuselage   ☐ Motor Controller

☐ Receiver   ☐ Remote   ☐ Propeller   ☐ Anode   ☐ Propeller Duct

Repair work details

Efoil Hours of use

City / Country

Name of Technician

Authorized Repair Centre

Signature of Technician