

LAGOON USER MANUAL

November, 2017 Version 1.2

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Acknowledgements

Thanks for choosing ePropulsion products, your trust and support in our company are sincerely appreciated. We are dedicated to providing high-performance underwater thrusters, as well as electric outboards, reliable lithium batteries and accessories.

Welcome to visit www.epropulsion.com and contact us if you have any concerns.

Using this Manual

Before use of the product, please read this reference manual thoroughly to understand the correct and safe operations. By using this product, you hereby agree that you have fully read and understood all contents of this manual. ePropulsion accepts no liability for any damage or injury caused by operations that contradict this manual.

Due to ongoing optimization of our products, ePropulsion reserves the rights of constantly adjusting the contents described in the manual. ePropulsion also reserves the intellectual property rights and industrial property rights including copyrights, patents, logos and designs, etc.

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This manual is multilingual, in the case of any discrepancy in interpretation of different language versions, the English version shall prevail.

Symbols

The following symbols will help to acquire some key information.



Important instructions or warnings



Useful information or tips

Product Identification

Below Figure 0-1 indicates the position of the serial number for LAGOON Battery. Figure 0-2 and Figure 0-3 indicate the position of serial numbers for LAGOON Controller and LAGOON Motor.

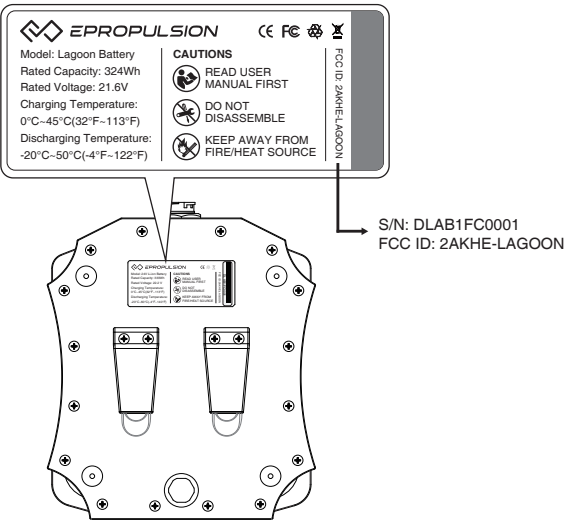


Figure 0-1

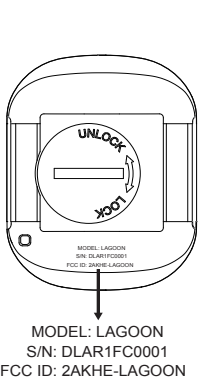


Figure 0-2

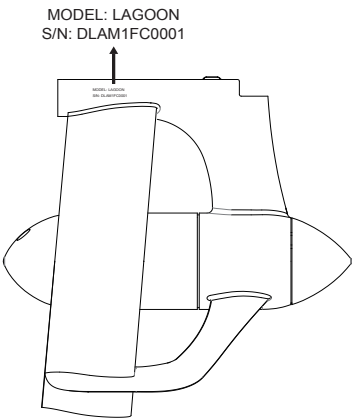


Figure 0-3


 The above three parts have different serial numbers. Please record all the three serial numbers for access to maintenance or other after-sale services.

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1. Important Safety Instructions ---

This user manual contains important information pertaining equipment installation and safety instructions. Before starting to use the product, please read this manual fully and pay special attention to the following safety instructions:

Before Operation

- Users who are allowed to use LAGOON should be in good physical state, know how to swim and how to paddle.
- Always wear a life vest and always wear a leash when operating.
- Always take a paddle on board.
- Only adults who have thoroughly read and fully understood this manual are allowed to operate this product.
- Check the status and function of LAGOON before use and make sure all components are in good condition.
- Make sure the LAGOON Motor is securely mounted on the bottom of the SUP/kayak, etc. before operation.
- Make sure the LAGOON Controller works well by wireless connection.
- Familiarize yourself with all the operations related to this product.
- Check applicable local water safety rules and boating regulations before use.
- Observe the surrounding environment in advance to avoid unfavorable conditions such as strong winds, waves, currents or rapids, etc.

During Operation

- Do not rotate the motor in shallow water or out of water. Only operate it in water with enough depth and avoid all possible obstacles.
- Follow the correct operating instructions in this user manual.
- Attach the LAGOON Controller to your wrist or paddle for easy access.
- Do not run the motor if swimmers or other watercrafts are near the boat.
- Press the on/off button on the LAGOON Controller immediately in emergency situations.
- Observe local water safety rules and boating regulations while operating the product.
- Do not run the motor under the influence of alcohol or drugs.
- Switch off the LAGOON Battery and LAGOON Controller before detaching

- the LAGOON Motor from the SUP/kayak, etc.
Make sure the power cable connector is tightened before use, otherwise severe damage may occur to the product during operation.

Handling

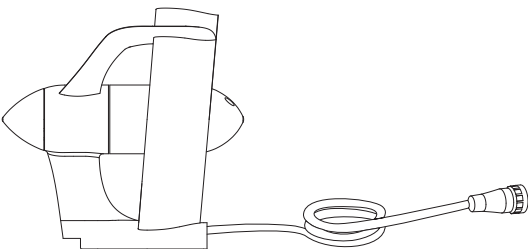
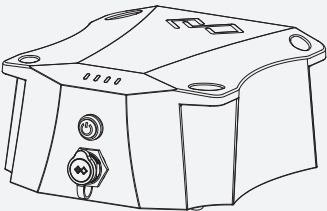
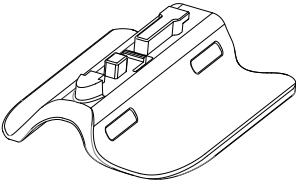
- **Never run the motor in the air as it will seriously shorten the motor service life, generate loud noise and possibly cut fingers. Even if users unintentionally run the motor in the air, the motor will stop running immediately in 5 seconds for protective purpose, and the motor may be unable to start normally. Never get close to the running propeller.**
- Never dismantle or repair the product on your own or by any unauthorized third party.
- Keep it away from flammable gas, corrosive and other dangerous substance. Store it in a dry and ventilated place without direct sun/rain exposure and store it far away from dangerous substances.
- Pay attention to battery safety and operate it in the right way to avoid short-circuit, overheat, overcharge and over-discharge. Never drop the battery.
- Only use LAGOON Charger designed for the battery. Other chargers may lead to shortened runtime, premature battery failure, or even fire or explosion.
- Clean the LAGOON Motor with fresh water after each use.

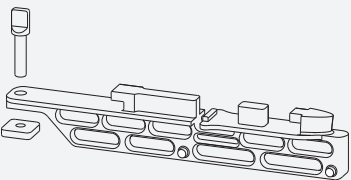
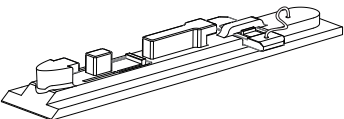
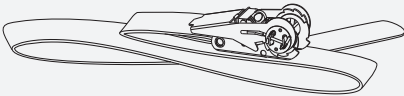
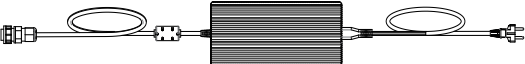
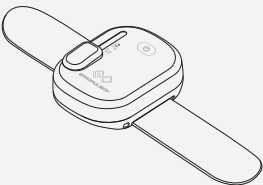



2. Product Overview ---

LAGOON is a set of electric propulsion kit designed for SUP/kayak. The well-adapted LAGOON is compatible with nearly all SUPs, kayaks, canoes, etc. This product mainly consists of a LAGOON Motor, a LAGOON Battery and a wireless LAGOON Controller. This small but mighty propulsion kit supports about 1 hour of full-speed running, perfectly backing you up whether you need a rest or want to go further.

2.1 In the Package

Unpack the package and check if there is any damage caused during transport. Check all the items inside the package against the below list. If there is any transport damage or lack of any listed item, please contact your dealer immediately.

No.	Items	Qty./Unit	Figure
1	LAGOON Motor	1 set	
2	LAGOON Battery	1 set	
3	LAGOON Universal Adapter	1 set	

4	US Fin Box Adapter (standard)	1 set	
5	Inflatable SUP Fin Box Adapter (standard)	1 set	
6	Ratchet Strap	2 pieces	
7	LAGOON Battery Charger	1 set	
8	LAGOON Controller with a Velcro Tape	1 set	
9	User Manual Quick Start & Warranty Card	1 set	  



Attach the LAGOON Motor to the bottom of the watercrafts by using a standard adapter which is compatible with the fin box on the watercraft, or using the LAGOON universal adapter for watercrafts that have different fin boxes or without a fin mounting system.



Other accessories mentioned in this manual are not included in the package. Please place additional orders if you need them.



Save the original package for transport and storage.

2.2 Parts and Diagrams

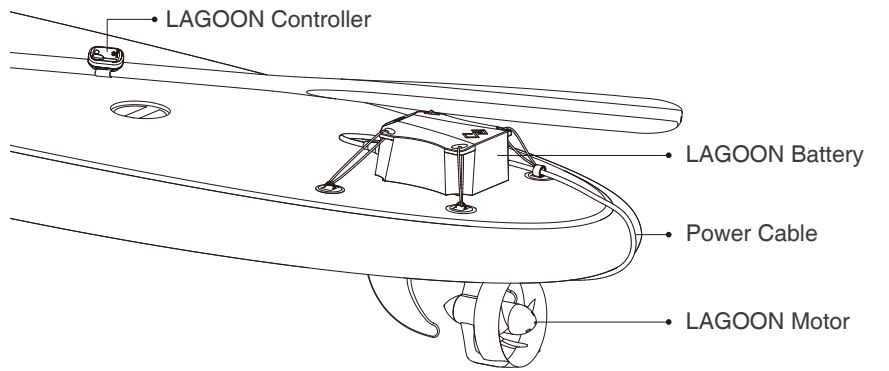


Figure 2-1 LAGOON Overviews

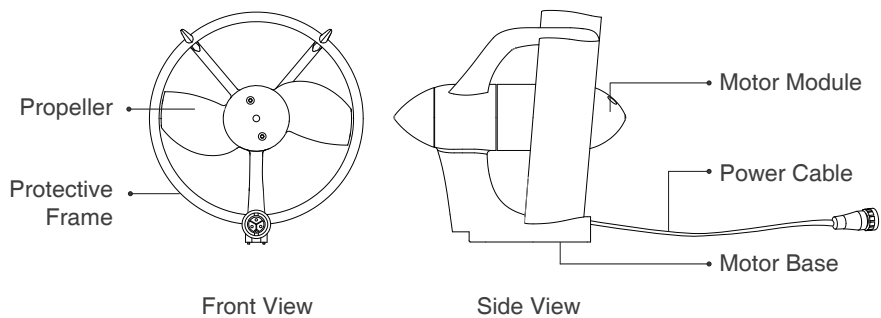


Figure 2-2 LAGOON Motor

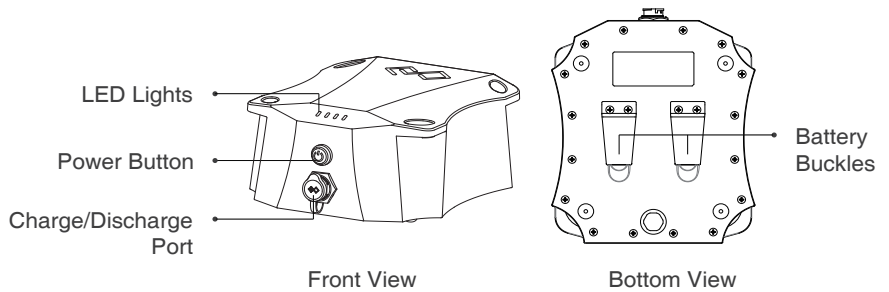


Figure 2-3 LAGOON Battery

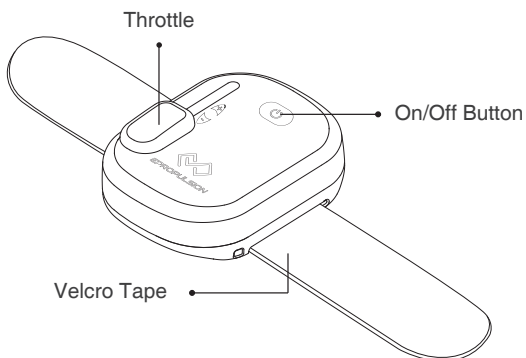


Figure 2-4 LAGOON Controller

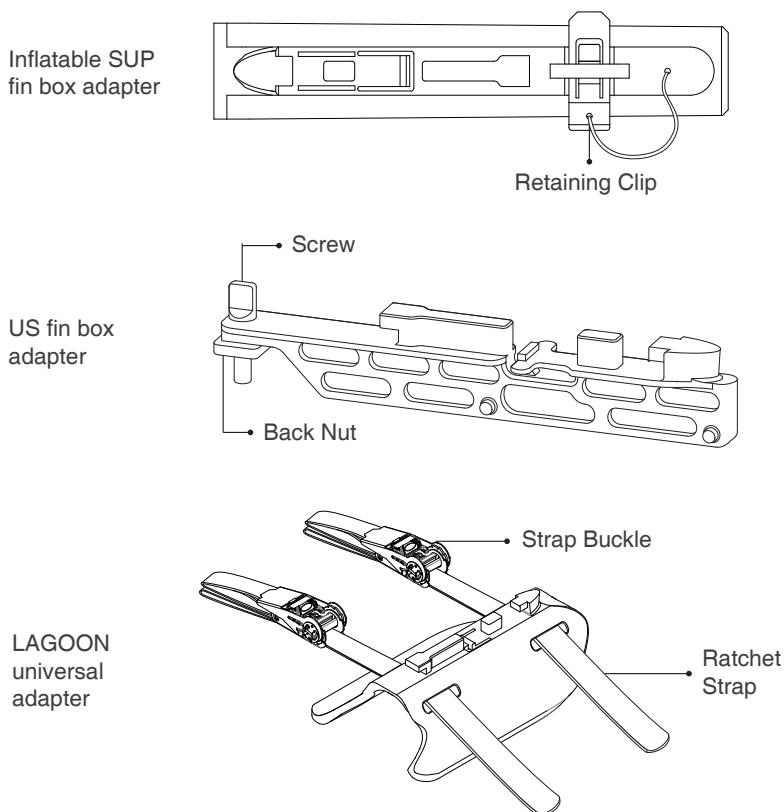


Figure 2-5 Adapters


2.3 Technical Data

LAGOON General Data	
Input power	300W
Static thrust	23lbs
Total weight	4Kg / 8.8lbs
LAGOON Motor weight	1.5Kg / 3.3lbs
Dimension	162mmx167mmx182 mm / 6.4"x6.6"x7.2"
Propeller diameter	150mm / 5.9"
Propeller pitch	115mm / 4.5"
Max propeller speed in rpm	1800rpm
Control method	Wireless

LAGOON Battery	
Battery type	Lithium-ion
Rated capacity	324Wh
Rated voltage	21.6V
Final charging voltage	25.2V
Cutoff voltage	18V
Weight	2.5Kg
Cycle life	≥500 cycles (80% of rated capacity)
Charging time	3hrs
Temperature range	Charging: 0°C ~ 45°C / 32°F ~ 113°F Discharging: -20°C ~ 50°C / -4°F ~ 122°F
Relative humidity	65 ± 20%RH
Dimension	216mmx178mmx100mm / 8.5"x7"x4"

LAGOON Controller	
Type	Wireless
Throttle	Stepless throttle
Forward/Reverse control	Forward control available
Power source	One built-in button cell (CR2032)

LAGOON Charger	
Input power	180W
Input voltage (AC)	100V ~ 240V
Input frequency	50Hz / 60Hz
Input current	≤ 3A
Output voltage (DC)	25.2V / 7A
Temperature range	Operating: -29°C ~ 45.5°C / -20.2°F ~ 113.9°F Storage: -40°C ~ 75°C / -40°F ~ 167°F
Efficiency	≥87%

 Battery performance is dependent on many external factors such as operating environment and conditions of SUP/kayak, etc.

2.4 Declaration

Object of the declaration:

Product: Small Electric Thruster

Model: LAGOON, LAGOONS

Company Name: Dongguan ePropulsion Intelligence Technology Limited

Company Address:

Room 202, Bldg.17A, Headquarter No.1, 4th XinZhu

Road, SongShan Lake District, Dong Guan, Guang Dong, China

The object of the declaration is in conformity with the following directives:

EMC-directive 2014/30/EU

MD-directive 2006/42/EC

RED Directive 2014/53/EU

Applied standards:

EN 55014-1:2006+A1:2006+A2:2011 EN 55014-2:2015

EN 61000-3-2:2014 EN 61000-3-3:2013

EN 60204-1: 2016 EN ISO 12100: 2010

EN 301 489-3: V2.2.0 EN 301 489-1: V2.2.1

The original certificate was issued by

Shenzhen An-Teng Testing Service Co., Ltd. in Shenzhen, China.

CE Test Report No.: ATT1710200303E, ATT1710200303M, ATT1710200303D
Issued Date: October 20, 2017

This device complies with part 15 of the FCC Rules: Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference and,
- (2) This device must accept any interference received, including interference that may cause undesired operation.

FCC Test Report No.: GTS201611000175E01
Issued Date: December 09, 2016

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

Signature: 陶师正

Shizheng Tao, Chief Executive Officer & Cofounder of
Dongguan ePropulsion Intelligence Technology Limited

3. Installation

LAGOON comes with two adapters that can be fit into two major standard fin boxes which are widely used on most SUPs and a universal adapter for kayaks and any small watercraft without standard fin boxes.

3.1 Installation of LAGOON Motor

Before installing the LAGOON Motor to an SUP/kayak, etc., note that the SUP/kayak, etc. must be strong enough to support the LAGOON Motor and LAGOON Battery.

3.1.1 Install with a Standard Adapter

Two standard adapters are included in the LAGOON package: US fin box adapter and inflatable SUP fin box adapter. These two standard adapters can be used with the corresponding standard fin boxes in the market. Choose a suitable one and follow the below steps to attach the LAGOON Motor to the standard fin box on the bottom of the SUP/kayak.

a. Install with a US fin box adapter

- 1) Attach a US fin box adapter onto the motor module base as shown in the Figure 3-1. First align the adapter with the motor base; then insert the adapter into the motor base until it is well attached.

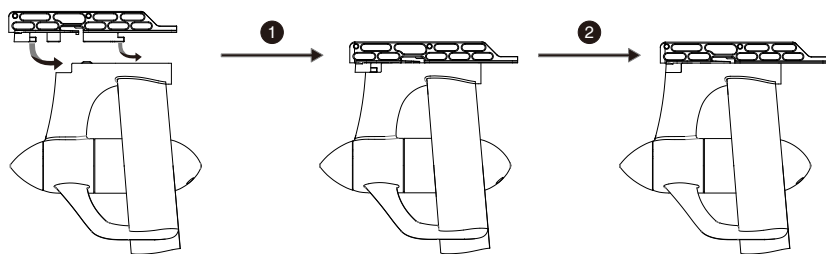


Figure 3-1

- 2) Turn the SUP/kayak bottom up to attach the US fin box adapter.

Step1: Place the back nut into the slot of the US fin box, and move the nut to the slot end near the tail of the SUP/kayak, etc.

Step2: Insert the adapter into the US fin box in the direction of the arrow, and slide it in until it fully enters;

Step3: Move the back nut in the slot to align it with the hole on the adapter, then insert the screw into the hole and screw it tightly into the back nut.

Step4: The LAGOON motor is well attached to the US fin box.

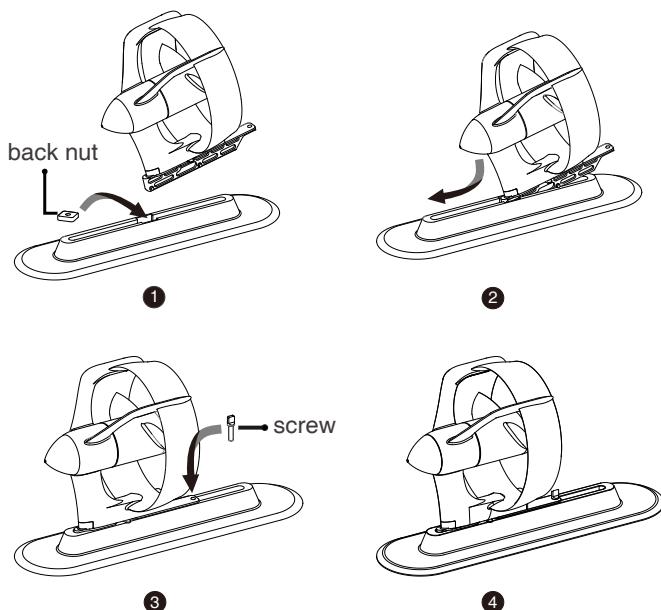


Figure 3-2



The propeller should face the tail of the SUP/kayak, etc.

b. Install with an inflatable SUP fin box adapter

- 1) Attach an inflatable SUP fin box adapter onto the motor module base as shown in Figure 3-3. First align the adapter with the motor base; then insert the adapter into the motor base until it is well attached.

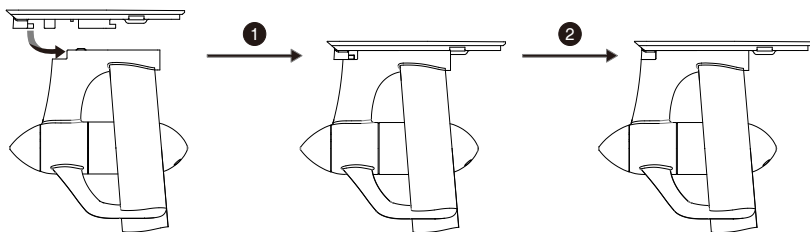


Figure 3-3

- 2) Turn the SUP/kayak bottom up to attach the inflatable SUP fin box.
- Step1: Slide the standard adapter into the cave of the inflatable SUP fin box.
- Step2: Insert the retaining clip into the place indicated in Figure 3-4 to fix the adapter.

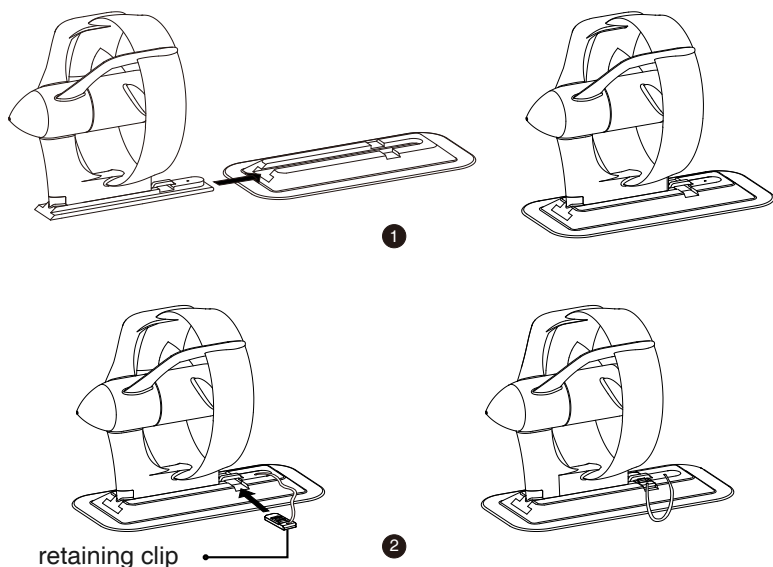


Figure 3-4

- ⚠ Do not force the adapter into the fin box. If the adapter can't fit into the fin box properly, slide it out and check if the installing direction is correct.
- 💡 The propeller should face the tail of the SUP/kayak, etc.
- 💡 Make sure the fin box is clean before installation of the motor module.

3.1.2 Install with LAGOON Universal Adapter

If the SUP/kayak, etc. has no fin box or if both the two standard adapters can't fit into the existing fin mounting system, it's suggested to use LAGOON universal adapter to attach the LAGOON Motor. While mounting with the LAGOON universal adapter, please follow the below steps.

- 1) Turn the SUP/kayak, etc. bottom up.
- 2) Penetrate the two ratchet straps through the side opening of the universal adapter and attach the universal adapter onto the relatively flat part on the bottom.

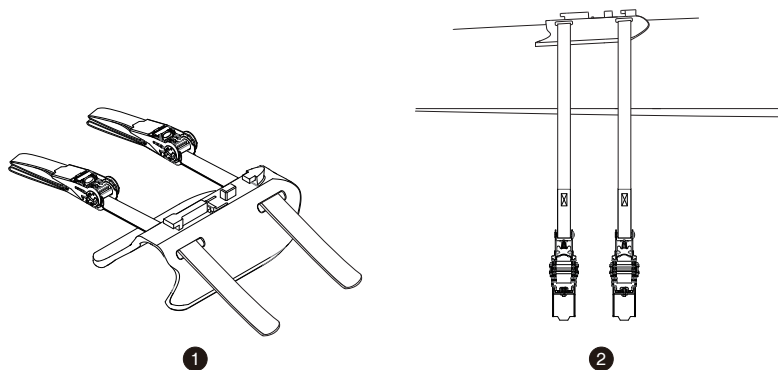


Figure 3-5

3) Fix the two ratchet straps: first, penetrate the strap into the buckle; then, repeat unfolding and folding the buckle to tense the strap. Fold the buckle when the strap is tensed.

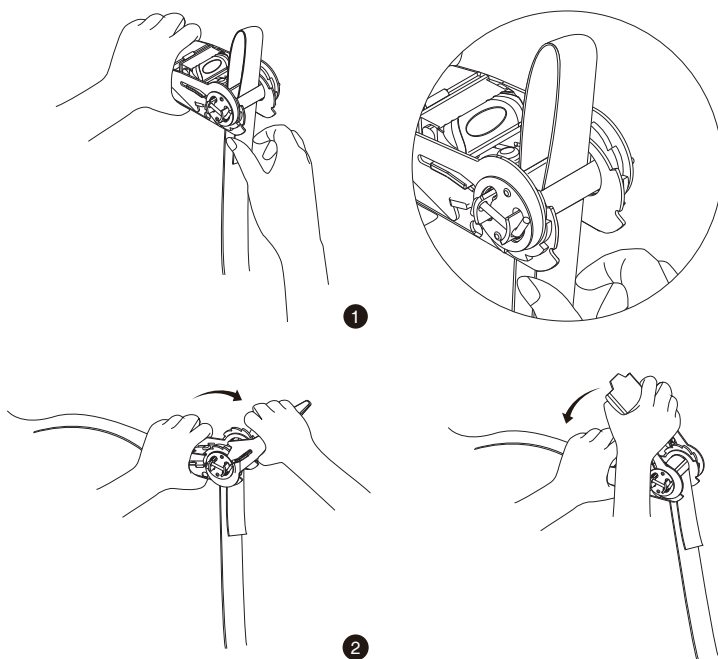


Figure 3-6

4) Attach the motor module to the universal adapter in the arrow direction.

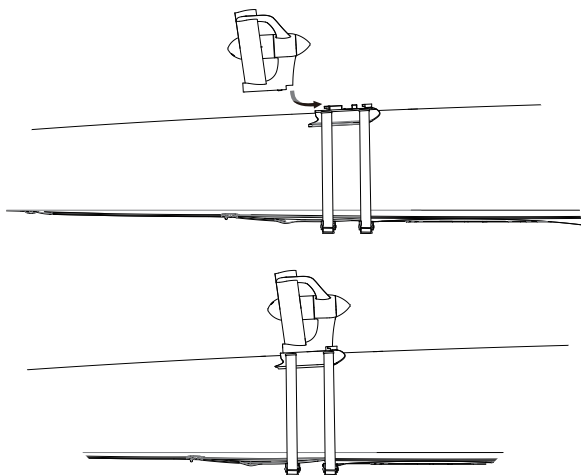


Figure 3-7

- 💡 The propeller should face the tail of the SUP/kayak, etc.
- 💡 While installing the universal adapter, make sure the adapter is in alignment with the bottom centerline of the SUP/kayak, etc.

3.2 Fix LAGOON Battery

a. Fix LAGOON Battery on SUPs

There are two major methods of fixing the LAGOON Battery on an SUP. For SUP with a bungee system, the battery can be fixed with the bungee cords.

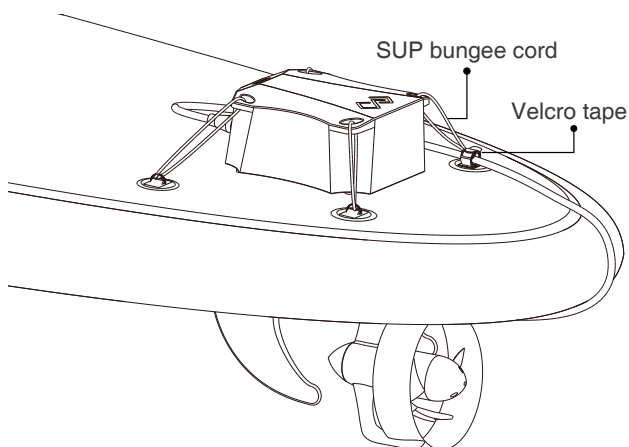


Figure 3-8 Fix the battery with the SUP bungee cords

For SUPs without bungee system, users can make use of the buckles on the bottom of the LAGOON Battery to clip a ratchet strap tied around the SUP.

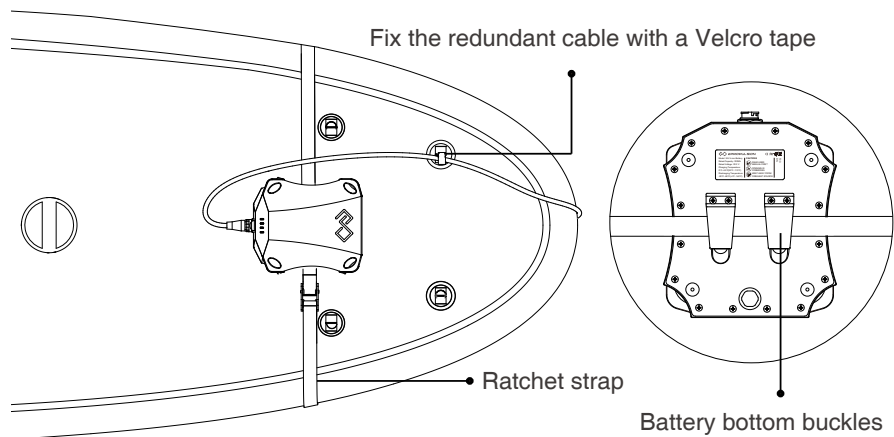


Figure 3-9 Fix the battery by ratchet strap

 Fix the redundant power cable with a Velcro tape.

b. Fix LAGOON Battery on Kayaks

For kayaks with enough cabin space, the battery can be simply placed inside the cabin. For some kayaks, the battery can also be fixed on the rear part of the kayak with its bungee cords as shown in below figure.

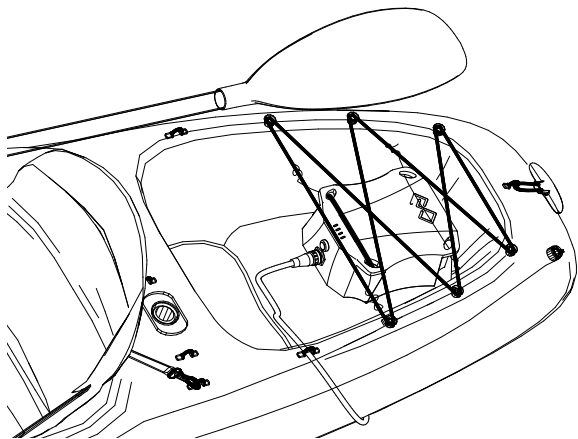


Figure 3-10

3.3 Connect LAGOON Battery to LAGOON Motor

Flip the SUP/kayak, etc. over after the motor module is firmly installed on the bottom. Plug the motor cable connector into the charge/discharge port of the LAGOON Battery and tighten the connector. Fix the power cable with a Velcro tape.

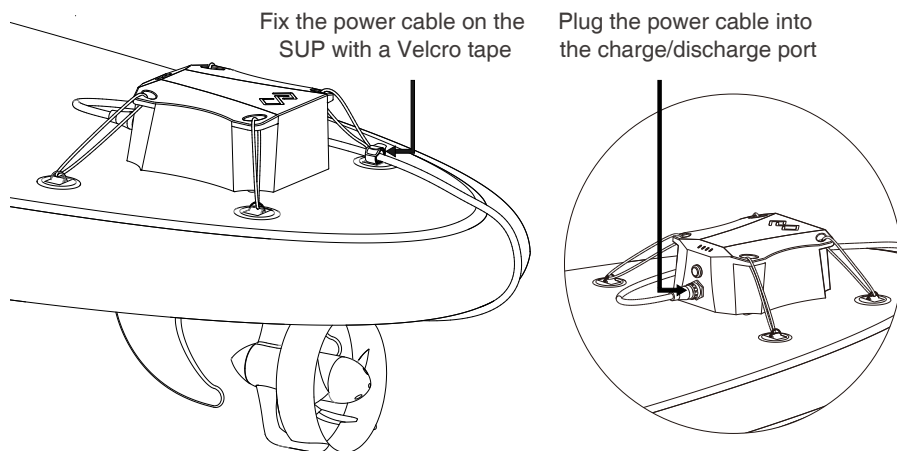


Figure 3-11



Pay attention not to hit the thruster against the ground or other objects while flipping the SUP/kayak, etc.

3.4 Attach the LAGOON Controller

The LAGOON Controller can be attached to a paddle or wrist for easy access. You need to penetrate a Velcro tape through the side opening of the LAGOON Controller and bind the strap tightly around the wrist or paddle as shown in Figure 3-12.



Make sure the Velcro tape is tightly bound if you wear it or attach it to a paddle to avoid it falling into water.



If the LAGOON Controller falls into water by accident, a wireless communication failure may occur and the LAGOON Motor will stop rotation at once.

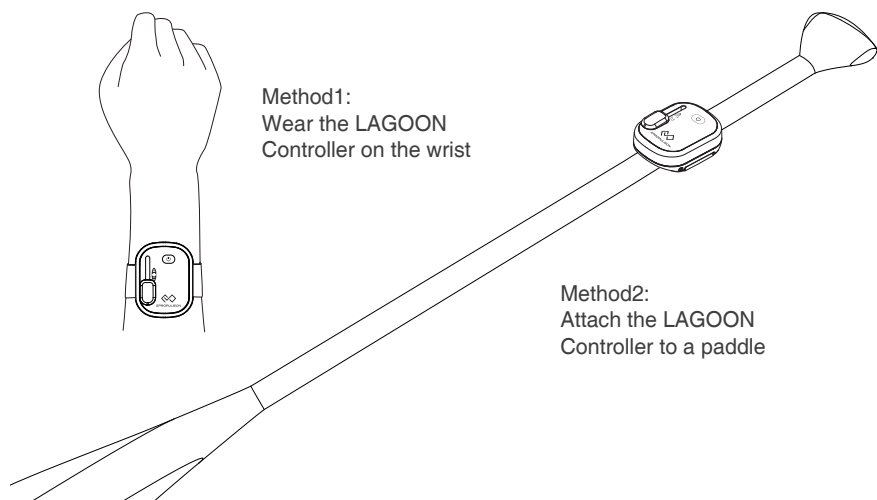


Figure 3-12

4. Operation

To operate LAGOON, it's critical to understand how to use the battery and controller correctly. This part first introduces the usage of LAGOON Controller and LAGOON Battery, then gives correct pairing procedures.

4.1 Use of LAGOON Battery

4.1.1 Battery LEDs

The four LEDs on LAGOON Battery can display battery level while charging and discharging and indicate errors during operation. The below figure indicates the position of the four LEDs on LAGOON Battery.

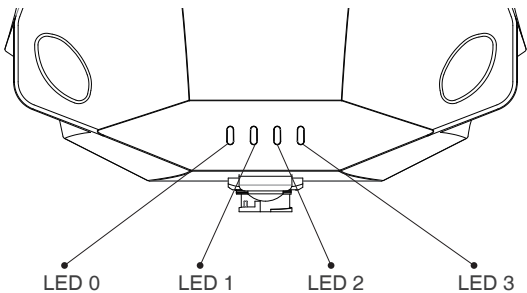



Figure 4-1

Below table illustrates the state of the LEDs while charging and discharging.

Battery Condition	Description	Battery Level (L-R)			
Charging	0%~40%	★			
	40%~60%	●	★		
	60%~80%	●	●	★	
	80%~99%	●	●	●	★
	100%	●	●	●	●
Discharging	0%~20%	★	★	★	★
	20%~40%	●			
	40%~60%	●	●		
	60%~80%	●	●	●	
	80%~100%	●	●	●	●






Note: ●refers to steady light, ★refers to flashing light (1Hz).

 If the battery is between 0% ~ 20% when discharging, all LEDs will flash simultaneously to remind you to charge the battery as soon as possible.

If the LEDs present abnormal flashing states, please consult the below troubleshooting table for possible errors and corresponding solutions.

Abnormal LED States				Errors	Solutions
L0	L1	L2	L3		
☆	☆			Error1: LAGOON Controller communication failure	1. Make sure the LAGOON Controller is powered on. 2. Please refer to <i>section 4.3 Pairing LAGOON Controller with LAGOON Battery</i> to conduct pairing.
		☆	☆		
		☆		Error2: LAGOON Battery communication failure	Please restart the LAGOON Battery.
		☆	☆	Error3: Other errors of the battery	Please restart the LAGOON Battery.
	☆	☆	☆	Error4: LAGOON Battery over-temperature	Stop operation and wait until the temperature falls within the normal operating temperature range.

Note: ☆ refers to flashing light (an interval of 0.2s, a frequency of 5Hz).

-  If error1 occurs, L0 and L1 flash alternately with L2 and L3.
-  If an error occurs in a non-charging state, the LEDs will display the battery level (for 3s) and the error (for 3s) alternately.
-  If multiple errors occur simultaneously, the errors will be displayed in this priority sequence: Error4 → Error3 → Error1 → Error2.
-  Error4 LAGOON Battery over-temperature may occur during charging.
-  If the problem persists, please consult ePropulsion authorized dealers for assistance.

4.1.2 Switch On/Off the LAGOON Battery

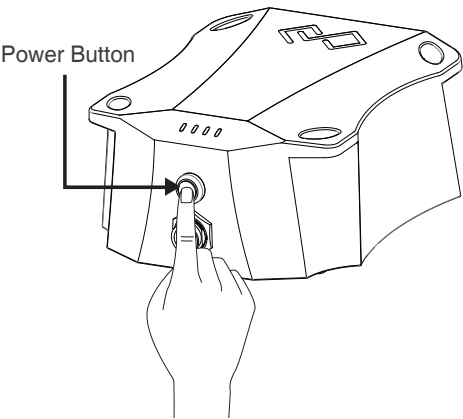


Figure 4-2

The below table indicates how to switch on/off the LAGOON Battery.

Operation	Description
Switch on	<p>In power-off state, press the power button and hold until all the four LEDs light up one by one from left to right. Then release the button, and the LEDs will indicate the actual battery level.</p> <p>💡 It will fail to switch on the battery if the power button is released before all the four LEDs light up.</p>
Switch off	<p>In power-on state, press the power button and hold until all the four LEDs light off one by one from right to left.</p> <p>💡 It will fail to switch off the battery if the power button is released before all the four LEDs light off, and all the four LEDs will flash simultaneously.</p>

⚠ Make sure the LAGOON Battery is switched off before mounting the LAGOON Motor.

⚠ Before switching on the LAGOON Battery, make sure the LAGOON Motor is safely mounted on the bottom of the SUP/kayak, etc.

💡 If no electrical activity is detected within an hour after the battery is

switched on, the battery will enter sleep mode automatically, then the four LEDs will all go off. The battery should be restarted if it is going to be used again.

4.1.3 Charge the Battery

Important notes before charging

- Only use LAGOON Charger to charge LAGOON Battery. Do not use any third party chargers.
- Only charge the LAGOON Battery in within 0°C~45°C (32°F~113 °F).
- Avoid water contact during charging process.
- Avoid direct sun/rain exposure during charging process.
- Do not overcharge the battery.
- Keep the battery away from flammable substance like a carpet or wood during charging process.
- In any case of emergency, please stop charging the battery immediately.

Charge the LAGOON Battery following the below steps:

- 1) Power off the battery, disconnect the battery power cable with the motor. Remove the battery off the SUP/kayak and take it to a dry and safe place.
- 2) Plug the output cable of LAGOON Charger into the charge/discharge port of LAGOON Battery and tighten the connector. Then plug the input cable of LAGOON Charger into the socket. Please refer to *4.1.1 Battery LEDs* for LED charging status.

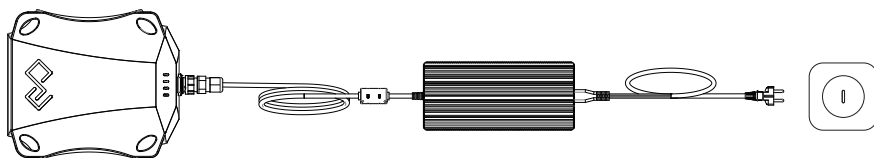


Figure 4-3



It is recommended to fully charge the battery before each use as self-discharge may occur in the process of transportation and storage.



It takes about 3 hours to fully charge a depleted battery. If fully charged, the LEDs will light off in half an hour.

4.2 Use of LAGOON Controller

4.2.1 Switch On/Off the LAGOON Controller

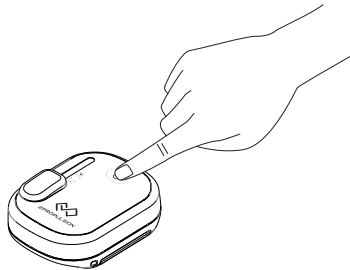






Figure 4-4

Below table displays how to switch on/off the LAGOON Controller.


Operations	Description
Switch on	In switch-off state, short press the on/off button and a beep is heard.
Switch off	In switch-on state, press the on/off button and hold until a beep is heard.


-  If the controller beeps continuously (and powers off automatically in 10 seconds), it indicates that the button cell inside the controller is running out and replacement of a new one (model: CR2032) is required. Refer to *section 4.2.3 Replacing Button Cell for LAGOON Controller*.
-  If you want to stop the running motor at once, please short press the on/off button.
-  Before powering on the LAGOON Controller, make sure the LAGOON Motor is safely attached to the bottom of the SUP/kayak, etc. and do not approach the motor to avoid getting hurt by the rotating propeller.
-  If a communication failure occurs, the LAGOON Controller will switch off in 10s. In normal communication conditions, if the motor stops rotating for 30min, the LAGOON Controller will also switch off automatically.

4.2.2 Wirelessly Control the LAGOON Motor

a. Start/Stop the LAGOON Motor

Operations	Description
Start the motor	Make sure the throttle is at neutral. Short press the controller's on/off button to switch on. Then push the throttle forward to start.
Stop the motor	Normal stop: Push the throttle back to neutral position to gradually stop the motor.
	Emergency stop: Short press the controller's on/off button to stop the motor immediately.

 Make sure to reset the throttle to neutral after emergency stop. Then push the throttle forward to start the motor again.

 If the LAGOON Controller falls into water by accident, the system will stop automatically to protect the safety of users.

b. Speed Control

The LAGOON Controller supports stepless forward speed control. After the motor is started, push the throttle slowly forward to speed up. For SUPs/ kayaks, etc. without a steering system, users can use a paddle to steer.

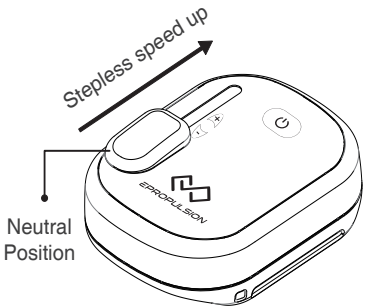



Figure 4-5

 Reset the throttle back to neutral before restarting the system.

4.2.3 Replace Button Cell for LAGOON Controller

LAGOON Controller is powered by a built-in button cell (model: CR2032). Short press the on/off button in power-off state. If the buzzer beeps continuously (the system powers off automatically after 10 seconds), it indicates that the button cell built inside LAGOON Controller is running out of battery and replacement of a new button cell (model: CR2032) is required.

You can replace a new button cell by steps below:

Step1: Screw the cell cover counterclockwise (from ① to ②) to open it.

Step2: Replace a new button cell with the "+" side up.

Step3: Screw the cell cover clockwise to lock.

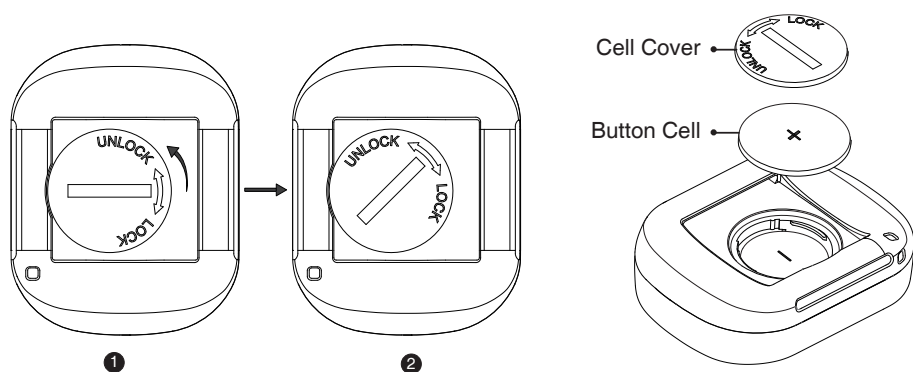


Figure 4-6 Unlock the Cover



In general, the battery may last up to 300 hours but as self-discharge may occur during long-term storage, it is recommended to replace the battery (CR2032) at least every half year.


4.3 Pair LAGOON Controller with LAGOON Battery

The LAGOON Controller has been paired with the LAGOON Battery prior to delivery, but pairing job has to be carried out if the original LAGOON Battery or LAGOON Controller is replaced with a new one. Users can follow the following instructions to finish pairing.

- 1) Turn off LAGOON controller and hold it within 10cm of the battery LEDs.
- 2) Power on the LAGOON Battery by long pressing its power button.
- 3) Press the battery's power button and the four LEDs flash simultaneously.

At this moment, long pressing the battery's power button for about 5s

until the LEDs flash more quickly.

- 4) Long press the controller's on/off button until it issues two beeps to indicate the controller enters pairing status. Release the button, the controller will issue another beep, and all battery LEDs light up one by one. Now pairing is done.
 - 5) If the controller fails to issue another beep, it indicates failure of pairing. Check if there is any mistake in previous operations and try again.
-  Do not use the LAGOON Controller out of the SUP/kayak, etc. as the LAGOON Battery may fail to receive wireless communication signal from the LAGOON Controller.

5. Detaching LAGOON Motor

After use of LAGOON, please detach the LAGOON Motor from the SUP/kayak, etc. in correct procedures.

Notes before detaching the LAGOON Motor.

First, take the LAGOON Battery out of your SUP/kayak, etc. by below procedures:

- 1) Long press the power button to switch off the LAGOON Battery.
- 2) Disconnect the LAGOON Motor with the LAGOON Battery.
- 3) Take out the battery and place it in a dry and safe place.

Then, place your SUP/kayak, etc. bottom up in a flat.

a. Detach from a US fin box adapter

Step1: Loosen and take out the screw.

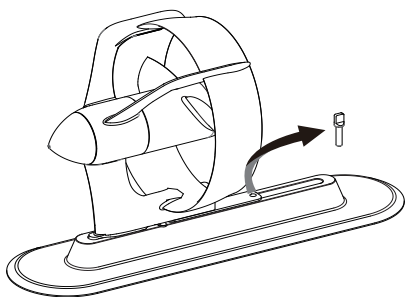


Figure 5-1

Step2: Take the LAGOON Motor and adapter out of the fin box.

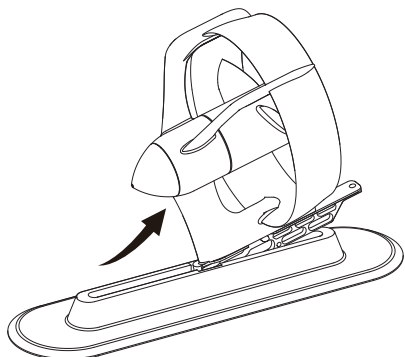


Figure 5-2

Step3: Pull the release buckles in the direction of ① ; meanwhile, slide the adapter in the direction of ② .

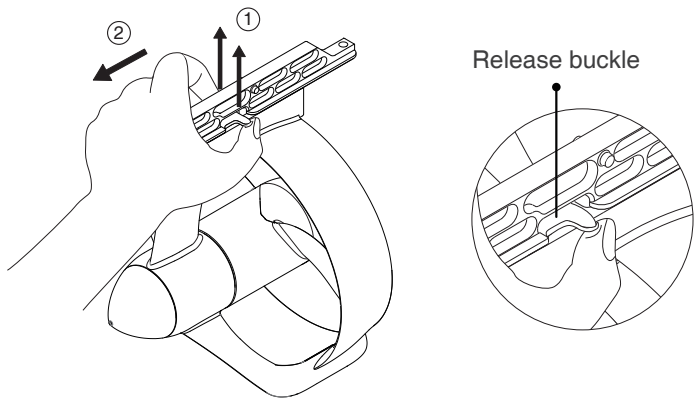


Figure 5-3

Step4: When the rear part of the adapter is slid to the position as shown in the below left figure, take out the adapter.

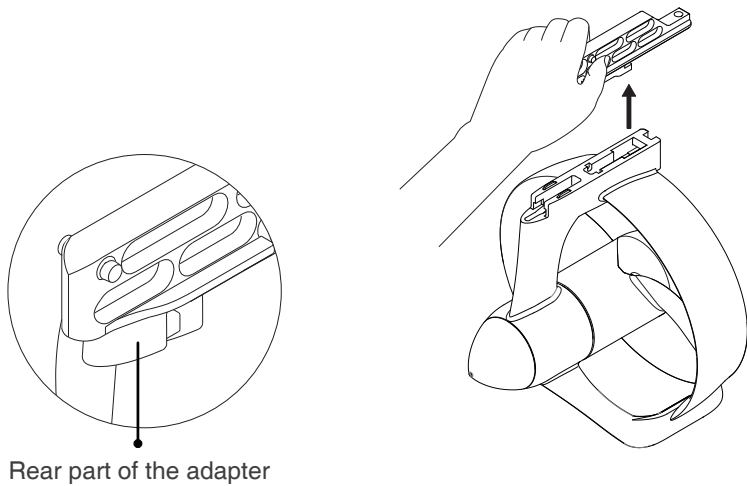



Figure 5-4

 Clean the motor and adapter with fresh water after the motor is detached.

b. Detach from an inflatable SUP fin box adapter

Step1: Draw out the retaining clip from the inflatable SUP fin box.

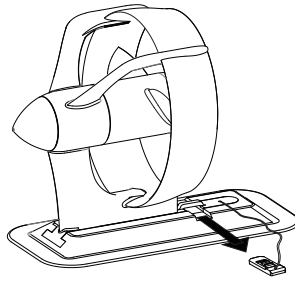


Figure 5-5

Step2: Slide the LAGOON Motor and adapter out of the fin box.

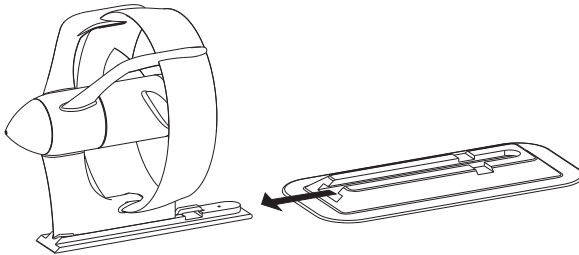


Figure 5-6

Step3: Pull the release buckle and slide the adapter backward in the direction of the arrow.

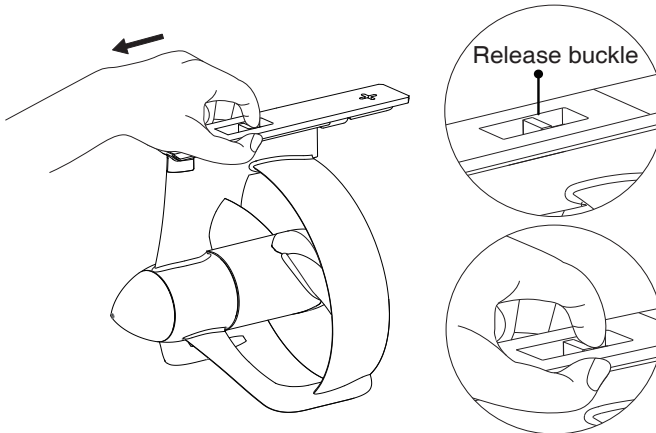


Figure 5-7

Step4: When the rear part of the adapter is slid to the position as shown in below left figure, take out the adapter.

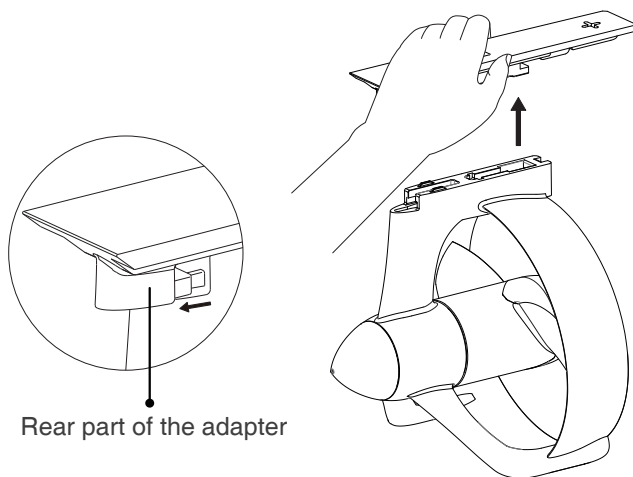

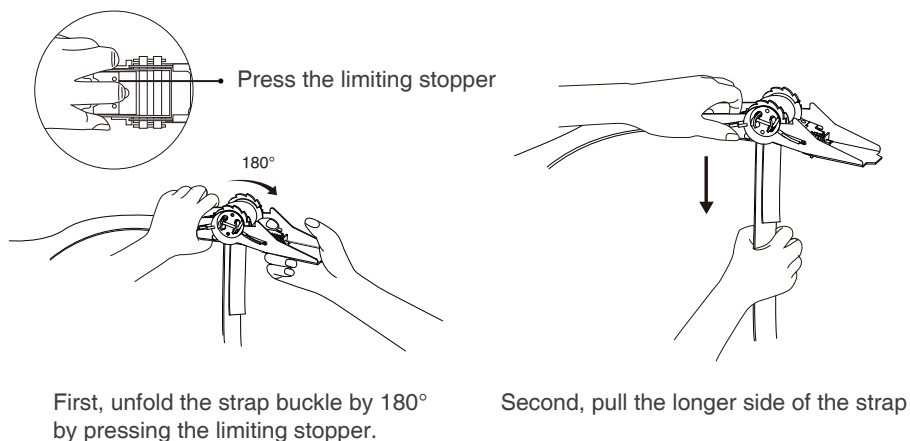


Figure 5-8

 Clean the motor and adapter with fresh water after getting them detached.

c. Detach from a universal adapter

Step1: Loosen the ratchet strap buckles (Figure 5-9).



First, unfold the strap buckle by 180° by pressing the limiting stopper.

Second, pull the longer side of the strap

Figure 5-9

Step2: Detach the LAGOON universal adapter and LAGOON Motor from the SUP/kayak, etc.

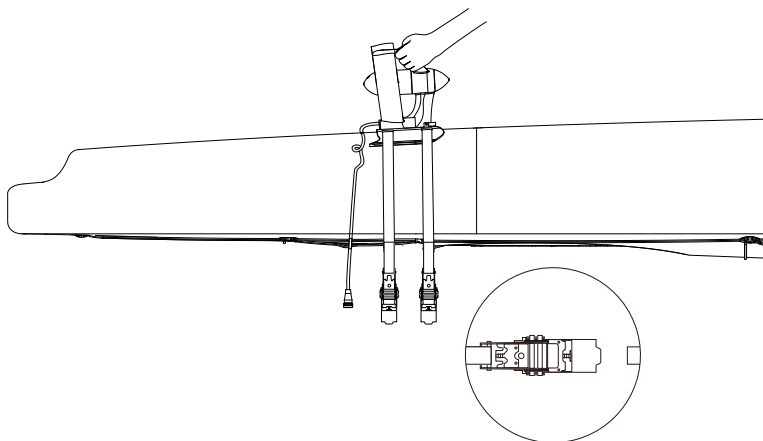


Figure 5-10



Hold the LAGOON Motor while loosening the ratchet strap.

Step3: Pull the release buckle and slide the universal adapter in the direction of the arrow.

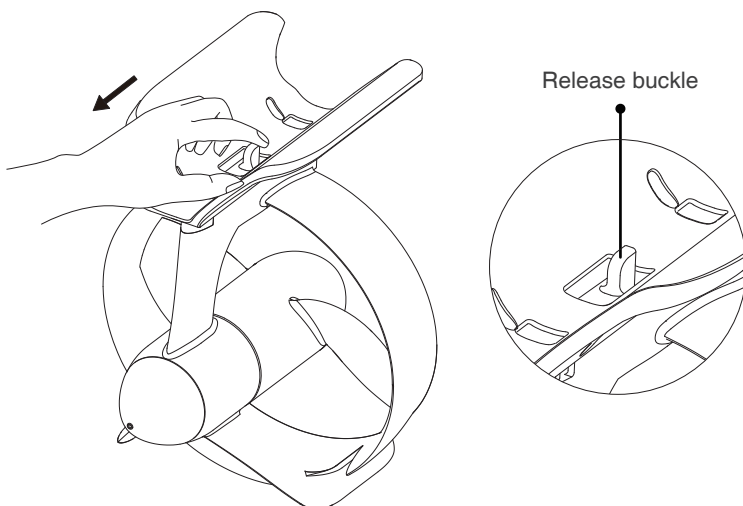


Figure 5-11

Step4: When the rear part of the universal adapter is slid to the position as shown in below left figure, take out the adapter.

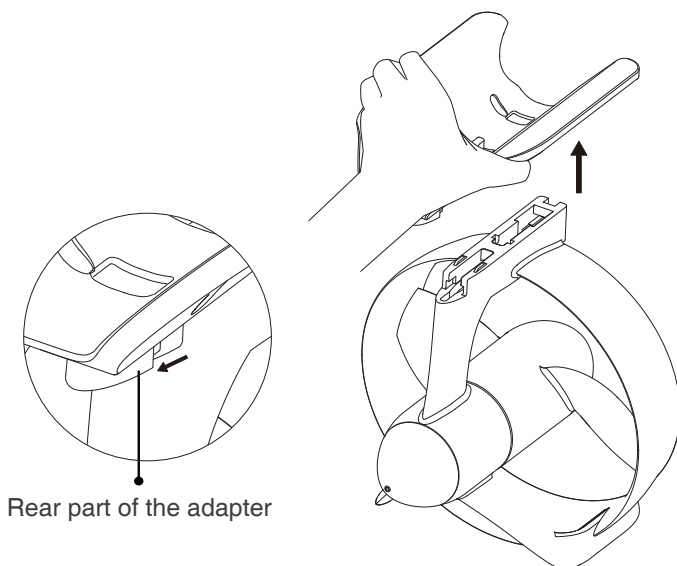


Figure 5-12

- 💡 If you are not going to use the universal adapter very soon, it's advised to detach the ratchet straps from the adapter.
- 💡 Clean the motor and adapter with fresh water after getting them detached.

6. Transport and Storage

6.1 Transport

For long-distance transport, please apply the original package of LAGOON to pack the product prior to delivery.

 Important notes before transport:

- Check and ensure the package is intact without any damage.
- Avoid violent vibration, strike or squeeze during transport. Get adequate damping protection measures before transport.
- Do not expose the LAGOON Battery to the sun or rain during transport.
- Check applicable laws and regulations before transport.

6.2 Storage

If you are not going to use LAGOON for a long time, it is advised to clean and check it prior to storage. It is recommended to pack LAGOON with its original package for storage.

 Important notes before storage:

- Make sure that each part of the product is dry before storing it in the package.
- Get adequate damping protection before storage.
- Store LAGOON Battery in a clean, dry and well-ventilated area without direct sun exposure.
- Avoid contact with corrosive substance which may cause permanent damage, weaken or destroy the plastic of LAGOON.
- Keep the LAGOON Battery away from any sources of fire, sparks, open flame or heat.
- Fully charge the LAGOON Battery before use after long-time storage.

7. Routine Maintenance

Various factors like operation environment (such as temperature, humidity, dust, etc.), aging and wear of internal components, will affect the performance of the product. Routine maintenance is very important for keeping LAGOON in its optimal operating state.

- It's suggested to take the LAGOON Motor out of the water after use.
- Check the cable regularly for damage.
- Charge the LAGOON Battery after each use.
- Do not run the LAGOON Motor in the air or in shallow water.
- Do not run the LAGOON Motor in water area with thick sediment.
- Clean the exterior of LAGOON Motor with fresh water after each use.
- Clean the debris in the cave of the adapters after each use.
- Do not drop LAGOON Battery and avoid it from direct sun/rain exposure for a long time.
- Check the battery level on a regular basis.
- Stop discharging the LAGOON Battery and charge it soon if the battery gets low.
- Before the first time use or reuse after long-term storage, charge the LAGOON Battery to its full capacity in order to achieve its best performance.
- Only use LAGOON Charger designed for the LAGOON Battery. Other chargers may lead to shortened runtime, premature battery failure, or even fire or explosion.
- Use the battery in moderate temperature to avoid negative effects of extreme temperature posed on battery lifespan and useful cycles.
- Once a fault occurs, deal with the problem in time to avoid any further damage. If necessary, consult the ePropulsion authorized dealer for repair or parts replacement.
- Always follow the instructions in this user manual.




8. Warranty

The ePropulsion limited warranty is provided for the first end purchaser of an ePropulsion product. Consumers are entitled to a free repair or replacement of defective parts or parts which do not conform with the sales contract. This warranty operates in addition to your statutory rights under your local consumer law.

8.1 Warranty Policies

ePropulsion Innovation (HK) Ltd. keeps its products free of defects in material and workmanship for a limited period since the date of purchase. Once a fault is discovered, the user has the right to make a warranty claim under the warranty policies of ePropulsion.

Product	Warranty Expiry Date
LAGOON	One year after the date of purchase
Repaired/Replaced Parts	Three months since the date of maintenance. Notes: 1. If the three-month period overlaps with the original product warranty period, the warranty against these replaced or repaired parts still expire one year after the date of purchase. 2. If the three-month period exceeds the original product warranty period, the repaired or replaced parts continue applying to warranty during the extended period.

-  In order to validate the warranty, users are required to fill in the Warranty Card in advance.
-  Keep the product label in an intact state and record the serial number on the label. Never tear the label off the product. An ePropulsion product without the original product label will not be applicable to warranty services provided by ePropulsion.
-  The warranty is valid only when the information on the Warranty Card is filled in correctly and completely.
Free warranty is only validated upon the presentation of legal serial

number, Warranty Card, and evidence of purchase from an authorized ePropulsion dealer.



Valid date of purchase should be established by the first-hand purchaser with original sales slip.



Free warranty is not transferable and will not be reissued.

8.2 Out of Warranty

Make sure the product is properly packed during delivery, the original product package is recommended. If the product got further damaged due to improper packing during delivery, the furtherly damaged part will be deemed as out of warranty coverage.

In addition, faults or damages caused by the following reasons are also excluded from warranty scope within the covered period:

- Any improper operation contradicts the user manual.
- Accident, misuse, intentional abuse, physical damage overcharging or unauthorized repair.
- Dropping, improper care or storage.



You should be noted that minor faults like normal wear and tear that pose no influence on the intended function of the product are also not covered by the warranty.




Consumables are out of warranty scope.

8.3 Warranty Claim Procedures

If you find your product defective, you can make a claim to your dealer following below procedures:

1. Fill in the Warranty Card correctly and completely in advance.
Then make your warranty claim by sending it to your authorized ePropulsion service partner together with valid proof of purchase. Usually these documents are required when making a warranty claim: the Warranty Card, ex-factory serial number, and evidence of purchase.
2. Send the defective product to your authorized ePropulsion service point after getting the confirmation. Note that the label should be kept intact. You can also deliver the product to your authorized ePropulsion dealer after getting confirmation.

3. The defective components or parts will be either repaired or replaced according to the diagnosis made by the ePropulsion authorized service partner.
 4. If your warranty claim is accepted, the equipment will be repaired or replaced free of charge.
 5. After careful examination and confirmation by ePropulsion authorized dealer, the defective or faulty components will be repaired or replaced based on actual condition.
 6. In case your warranty claim be rejected (please refer to out of warranty policies), an estimated repair charge with delivery cost included will be sent for confirmation. ePropulsion authorized service point will conduct maintenance accordingly only after your confirmation.
-  If warranty expires, you can still enjoy maintenance services from authorized ePropulsion service partners with corresponding maintenance charge.

Thanks for reading this user manual.

If you have any concerns or find any problems while reading, please don't hesitate to contact us. We are delighted to offer service for you.

ePropulsion Innovation (HK) Ltd.

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Email: service@epropulsion.com