E100 Battery User Manual

2025.11 Version 1.0

Acknowledgement

Thanks for choosing ePropulsion products, your trust and support in our company are sincerely appreciated. We are dedicated to providing high-performance, 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 user 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 the 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.

This manual is subject to update without prior notice. Please visit our website www.epropulsion.com for the latest version. If you find any discrepancy between your products and this manual, or should you have any doubts concerning the product or the manual, please visit www.epropulsion.com.

ePropulsion reserves the rights of final interpretation of this manual.

This manual is multilingual, in case of any discrepancy in the 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 Serial Number

Below figure indicates the position of the product label on which the serial number is located. Please record the serial number for access to maintenance or other after-sale services.

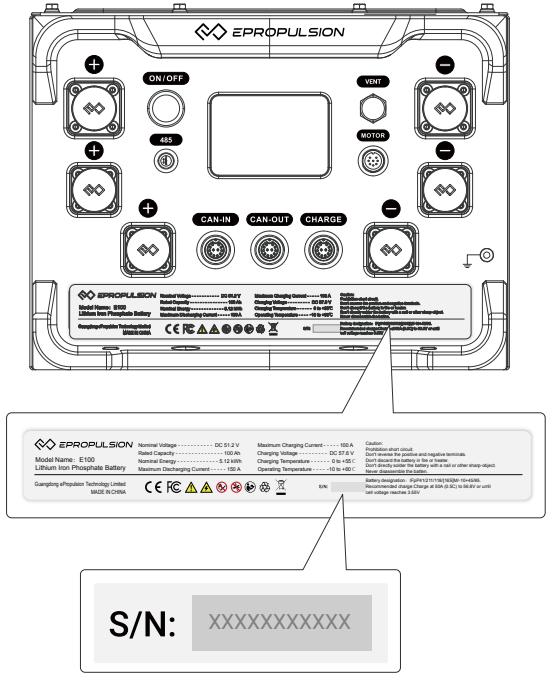


Table of Contents

1 Product Overview

The E100 battery is a lithium iron phosphate battery with good safety performance, high energy density, long cycle life and high reliability.

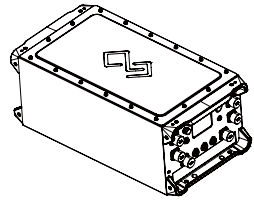
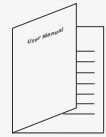
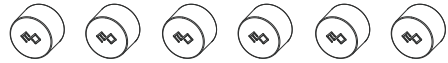
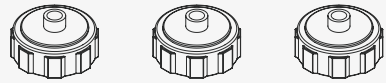
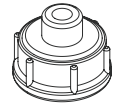
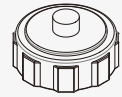
The E100 battery has a nominal voltage of 51.2V and a capacity of 100Ah.

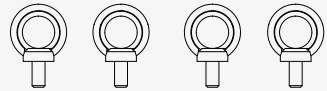
1.1 Product List

Save the ePropulsion original package for the battery storage.

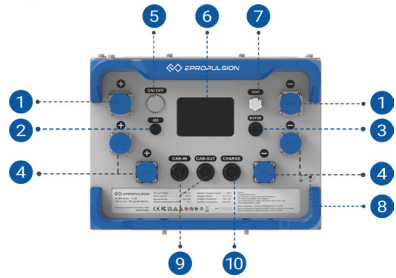
Other accessories mentioned in this user manual need to be purchased by users from ePropulsion authorized dealers.

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

Name	Quantity	Illustrations
E100 Battery	1	
User Manual	1	
Rubber plug	6	
CAN communication port waterproof cover	3	
48v Motor communication port waterproof cover	1	
96v Motor communication port waterproof cover	1	

Name	Quantity	Illustrations
Combination screws for stacking and fixing M8X16	4	
Eye Screws M6X12	4	

1.2 Parts and Diagramz



1 96V Terminals
2 48V Motor Communication port
3 96V Motor Communication port
4 48V Terminals
5 Power Button
6 Display Screen
7 Vent Valve
8 Grounding Point
9 Battery Chain Port
10 Charge Communication Port

Figure 1-1

- CAN-IN port can be connected with Battery remote switch or Battery communication terminator.

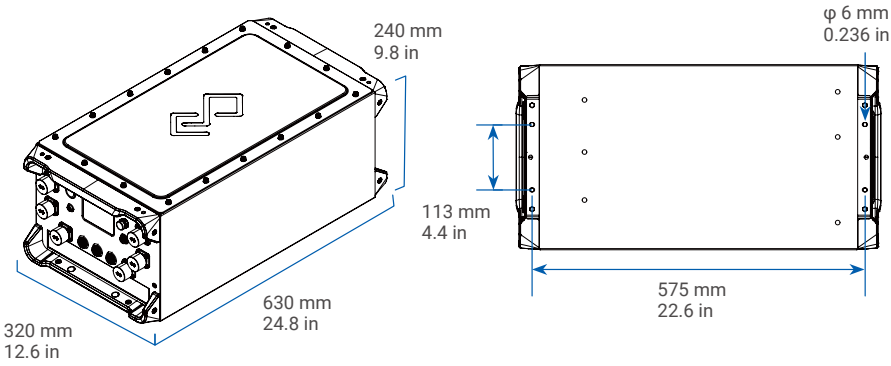
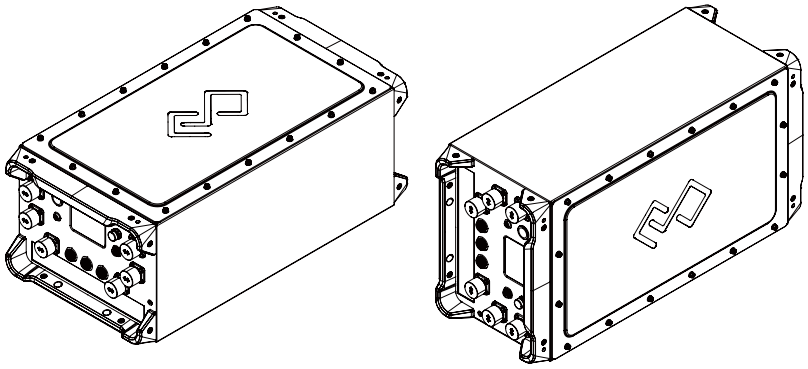


Figure 1-2

1.3 Specifications

/	E100	/
Chemistry	Lithium Iron Phosphate (LiFePO4)	/
Capacity	5.12 Wh / 100 Ah	/
Rated voltage	51.2 V	/
Final charging voltage	57.6 V	/
Cut-off voltage	41.6 V	/
Max continuous charge current	100 A	/
Max continuous discharge current	150 A	/
Parallel connection	Up to 16 in 1 cluster. Multiple clusters are possible in the system	/
Serial Connection	Up to 2 battery packs	/
Storage temperature	-20~45°C Less than 1 month;-10~35°C Less than 6 months	/
Charging Temperature	0 ~ 55°C (32 ~ 131˚F)	/
DischargingTemperature	-10 ~ 60°C (14 ~ 140˚F)	/
Dimensions	630 x 320 x 240 mm³ 24.8 x 12.6 x 9.5 in³	Includes decorative trim and its mounting bracket
Weight	48.5 kg	
Dimensions	580 x 320 x 240 mm³ 22.8 x 12.6 x 9.5 in³	Excludes decorative trim and its mounting bracket
Weight	47.5 kg	
Recommended battery level during storage	45%~50%	/

1.3.1 Installation orientations



1.4 Instructions before Use

- Before using the battery, please read the user manual carefully. Only adults who have fully read and understood this manual are allowed to operate this product.
- Before each use, check if the battery is firmly fixed, and check the condition, functionality and connection of the battery.
- Due to transportation and storage requirements, the battery is shipped half full. It is recommended to fully charge the battery before the first use.
- Avoid short-circuit of battery during connection, do not disassemble the battery.
- Do not store the battery in a damp environment.
- During use, keep away from an external heat source and high voltage equipment.
- Do not exposure to shock or excessive vibrations.
- During use, when a fault occurs, please check the alarm code on the display and troubleshoot the corresponding alarm code table.
- It is not recommended to stack batteries.
- Used batteries should be disposed of according to local laws and regulations.

1.5 Precautions

- **When the battery is not in use, please make sure that the waterproof caps of the battery are covered.**
- **Before connecting the battery with the third party product, please contact ePropulsion authorized distributor.**
- The capacity of the battery is obtained under the relevant standard conditions, and the actual capacity under different temperatures or charging and discharging conditions will be different from the nominal capacity.
- E100 Battery Battery is splash, water, and dust resistant and was tested before delivery with a rating of IP67. Splash, water, and dust resistance are not permanent conditions and resistance might decrease as a result of normal wear. Liquid damage is not covered under warranty.
- Do not expose the battery to high temperatures or sparks.
- Do not immerse or splash the battery in water.
- Ensure the battery can never cause a short via jewellery or tools.
- Do not exposure to shock or excessive vibrations.
- Never puncture the battery.
- Do not subject the battery to significant damage.
- Never touch a leaking battery or cell.
- Never mix up the positive terminals with negative terminals.
- Do not short circuit, overcharge or over discharge the battery.
- Never connect batteries in series.
- It is strictly prohibited to mix this battery with different types or specifications of batteries in parallel.
- If the battery is used in extreme environments (below 0°C or above 50°C), the battery life will be shortened.
- Charge the battery in the place that is safe, dry and free of flammable materials.
- When the battery is not used for an extended period of time, make sure the battery level is around 45%~50% before storing.
- Do not use conductive materials like metal that could cause a short circuit.
- Please keep the battery in a cool and dry place.
- Keep the battery away from children.
- Do not place the battery in direct sunlight.
- Never disassemble or modify the battery.
- Never open the battery case. If the case is damaged, do not use, charge or discharge the battery. Please contact ePropulsion authorized distributor.

1.6 EU Declaration of Conformity

We Guangdong ePropulsion Technology Limited, hereby, declares that this equipment is compliance with the applicable Directives and European Norms, and amendments.

Object of the Declaration:

Product:Lithium Iron Phosphate Battery

Model: E100

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

Recreational Craft Directive (RCD) 2013/53/EU

Electromagnetic Compatibility (EMC) Directive 2014/30/EU

Restriction of Hazardous Substances Directive 2011/65/EU and Delegated Directive (EU) 2015/863

EC REACH Regulation (EC 1907/2006)

Regulation on General Product Safety 2023/988

EU Battery Regulation 2023/1542

Applied Standards:

ISO 23625:2025

IEC 62619:2022

IEC 62620:2014+AMD1:2023

EN IEC 61000-6-3: 2021

EN IEC 61000-6-1: 2019

This declaration of conformity is issued under the sole responsibility of the manufacturer:
Guangdong ePropulsion Technology Limited.
Address: Room 801, Building 1, 11 Daxue Road, Songshan Lake, Dongguan, Guangdong Province, China

Signature: 陶师正 **Date:** 2025.10.16

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

1.7 FCC Compliance Statement

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.

1.8 Disposal and Environment

This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

2 Operation

2.1 Check the battery status

⚠ **Do not remove the masking tape or plug from the battery.**

⚠ Please avoid direct contact with water or continuous exposure to sunlight.

If the alarm indicator is on, refer to Section 2.5 Display screen, Section 2.6 Buzzer, and Section 3 Troubleshooting to deal with the problems. During this operation, the battery has no output.

During this operation, please cut off the output.

2.2 Using a single battery

2.2.1 Connecting the Battery to the Machine

⚠ When connecting the power cables, please pay attention to the positive and negative terminals. Never mix up the positive terminals with negative terminals.

⚠ Avoid battery short-circuit during connection.

⚠ When connecting, insert the power plug into place and hear a "click" sound to avoid false connection of the battery.

⚠ If it is connected to ePropulsion outboard motor, and the power cable or communication cable is abnormally connected, the outboard motor will stop.

Before connecting the battery to the machine (outboard, etc.), make sure that the battery power button is turned off and follow these steps:

1. Connect the power cable of the machine to the battery.
2. If connecting to an epropulsion outboard motor, in order to better obtain power information, please correctly connect the machine and battery with the communication cable of the outboard motor. If connecting with the control system by wire, please connect with the communication cable of the control system (refer to figure 2-1).

Y-type communication cable can be connected with the motor communication port on the battery or the communication port of the outboard motor.

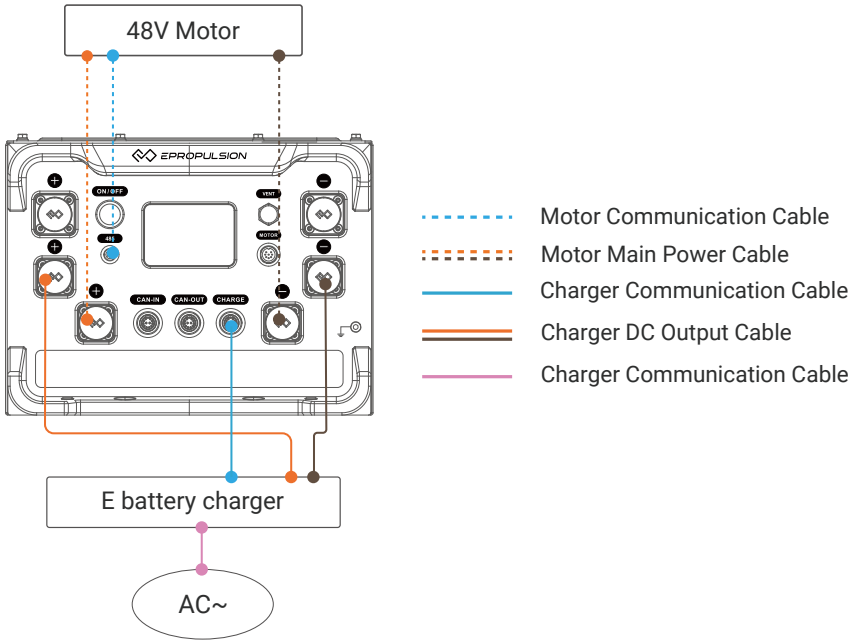


Figure 2-1

2.2.2 Turning on/off the Battery

The battery has an auto sleep function. After the battery is turned on, if no operation or use is carried out within 7 days, the battery will automatically turn off.

Before turning on the battery, please make sure that the power cable of the machine is securely connected to the battery, the connection is locked and there is no risk of slipping, and there is no short circuit.

a. Using the power button on the battery

1. To turn on the battery, please press and hold the power button on the battery for 1 second (no more than 3 seconds). The display will illuminate, the battery will start and self-check. If there is no warning, it means the battery is turned on successfully.
2. To turn off the battery, please press and hold the power button on the battery for 3 seconds, then the battery will turn off automatically.

b. Using Battery remote switch

The remote switch can only be connected to the CAN-IN port. Do not connect to the CAN-OUT port.

When using the remote switch, there is no need to operate the power button on the battery. Using either switch can control the switching on or off of the battery.

Remote switches need to be purchased separately.

When using an ePropulsion battery remote switch, please connect the remote switch with the CAN-IN port according to the following figure, then operate the remote switch.

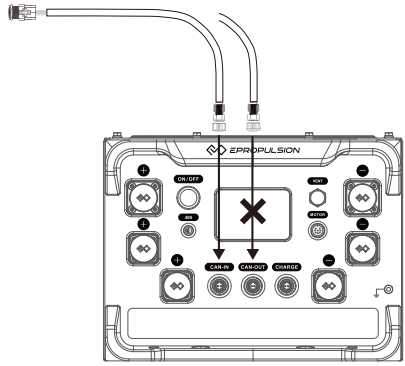


Figure 2-2

1. To turn on the battery, please press and hold the power button on the remote switch for 1second (no more than 3 seconds). The display will illuminate. The battery will start and self-check. If there are no warnings, it means the battery is really for use.
2. To turn off the battery, please press and hold the power button on the remote switch for 3 seconds, then the battery will turn off automatically.

2.2.3 Charging the Battery

Please read the following notices before charging:

Please use the ePropulsion charger specially designed for E-Series Batteries to charge the battery. If using a three party MPPT, please contact an authorized ePropulsion dealer.

The charger's communication cable needs to be connected to the battery's CHARGE port.

Please make sure that the AC power is turned off before charging.

Never mix up the positive terminals with negative terminals.

Only charge the battery at 0 ~ 55°C.

When charging, keep the battery away from water and avoid direct sunlight or rain. Charge the battery in the dry, ventilated place.

Avoid direct contact with the charger when in use, the charger can get to a high temperature.

Please do not overcharge the battery.

Keep the battery away from children.

① When charging the battery, connect the charger's power cable to the positive and negative terminals of the battery. The positive terminal of the charger's power cable is connected with the positive terminal of the battery, and the negative terminal of the charger's power cable is connected with the negative terminal of the battery. Then connect the communication cable from the charger to the battery CHARGE port. Make sure that the connection is correct.

② After confirming that the battery is turned off, connect the charger to AC power, and then press the power button on the battery/remote switch to turn on the battery. If the system has no alarms, indicating that the battery is successfully charging.

③ After the charging is completed, long press the power button on the battery/remote switch, then unplug the power plug of the charger, and then release the connection with the battery charger.

2.3 Using Batteries In Parallel

2.3.1 Connecting Batteries in Parallel

⚠ **Must connect the batteries in parallel when the batteries are fully charged, and the voltage difference must not exceed 2V.**

⚠ **When batteries are connected in parallel, the battery's CAN-IN port must be connected to a remote switch or a communication terminator (purchased separately).**

⚠ It is forbidden to use different types or specifications of batteries in parallel.

⚠ Before connecting, make sure the power button is off.

⚠ Never mix up the positive terminals with negative terminals.

Connecting two or more batteries in parallel can will expand their capacity. E100 battery support up to 16 batteries of the same type in parallel. Use battery bridging cables and E battery communication cables (purchased separately) to connect the batteries.
Use the E battery communication cable to connect the CAN-OUT port of the 1# battery (refer to figure 2-5) and the CAN-IN port of the 2# battery and so on. Please refer to the figure below.

2.3.2 Connecting Parallel Batteries to the Machine

⚠ When the parallel batteries are connected to the ePropulsion outboard motor, it needs to connect the outboard motor to 1# battery with the communication cable (refer to figure 2-3). And the outboard motor can only be connected with 1# battery.

⚠ When connected in parallel, the CAN-IN port must be connected to a remote switch or a communication terminator.

Refer to Section 2.2.1 to connect the 1# battery to the machine. The diagram below shows the parallel battery connected to the ePropulsion outboard motor.

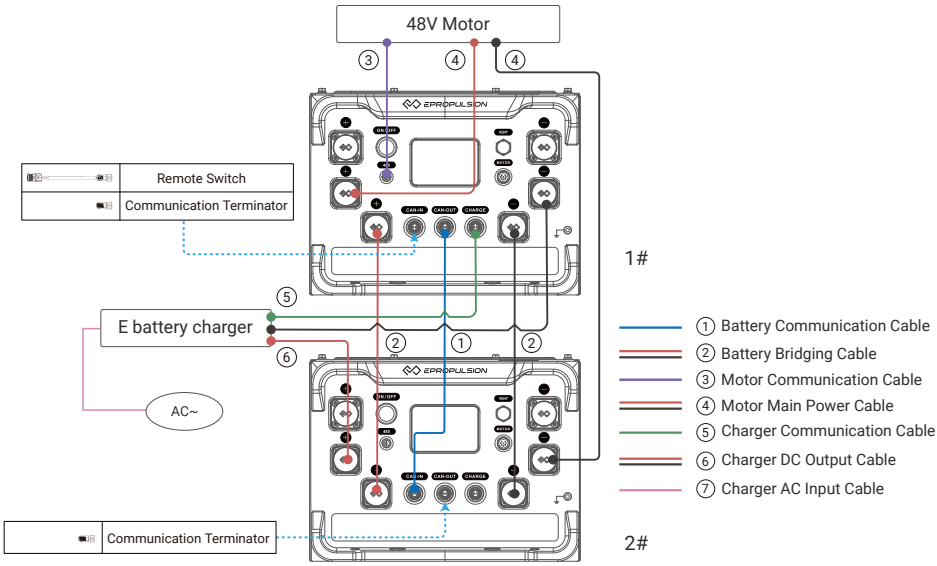


Figure 2-3

The maximum discharge current of the E100 battery is 150A. Only the machine with load current less than this value can be connected.

If the batteries are connected in parallel, the discharging current range will increase.

If the discharging current is exceeded, the fuse of the battery may be blown.

2.3.3 Turning on/off the Batteries in Parallel

When multiple batteries of the same model are connected in parallel, you can only press the power button on the 1# battery (the battery connects to the machine, refer to figure 2-3) or the remote switch to turn on/off the batteries.

1. To turn on the batteries, please press and hold the power button on the 1# battery or the remote switch. The displays of the batteries will light up one after another. After all of them are lit, release the button (no more than 5 seconds). The battery will start and self-check. If there are no warnings, it means the battery is really for use.

2. To turn off the batteries, please press and hold the power button on the 1# battery or the remote switch for 3 seconds, you can see the batteries are off.

After the battery is powered on, the battery's BMS and relay will consume the power of the battery itself. When the battery is not used for a long time, please turn off the battery power in time.

2.4 Using Batteries In Series

2.4.1 Connecting batteries in series

⚠ **The 2 batteries should be in the allowed SOC difference range for series connection. It is recommended to connect in series either in factory delivery condition or after fully charging each battery individually.**

⚠ **When batteries are connected in series, the battery's CAN-IN port must be connected to a remote switch (purchased separately) or a communication terminator.**

⚠ **The E100 battery supports up to 2 batteries connected in series.And it does not support parallel connection after being connected in series.**

⚠ It is forbidden to use different types or specifications of batteries in parallel.

⚠ Before connecting, make sure the power button is off.

⚠ Never mix up the positive terminals with negative terminals.

Using 2 E100 batteries in series can raise the voltage level from 48V to 96V. Two series-connected E100 batteries are compatible with 96V propulsion systems.

Please use the G battery communication cable (purchased separately) to connect each battery. The CAN-OUT port of 1# battery (refer to Figure 2-4) is connected to the CAN-IN port of 2# battery.

2.4.2 Connecting Series Batteries to the Machine

⚠ When the series batteries are connected to the ePropulsion outboard motor, it needs to connect the outboard motor to 1# battery with the communication cable (refer to figure 2-4). And the outboard motor can only be connected with 1# battery.

⚠ When connected in series, the CAN-IN port must be connected to a remote switch or a communication terminator.

⚠ The negative high-voltage cable of the propulsion system must be connected to the negative output port of 1# battery. The positive high-voltage cable of the propulsion system must be connected to the positive output port of 2# battery.

The diagram below shows the Series Batteries connected to the ePropulsion outboard motor.

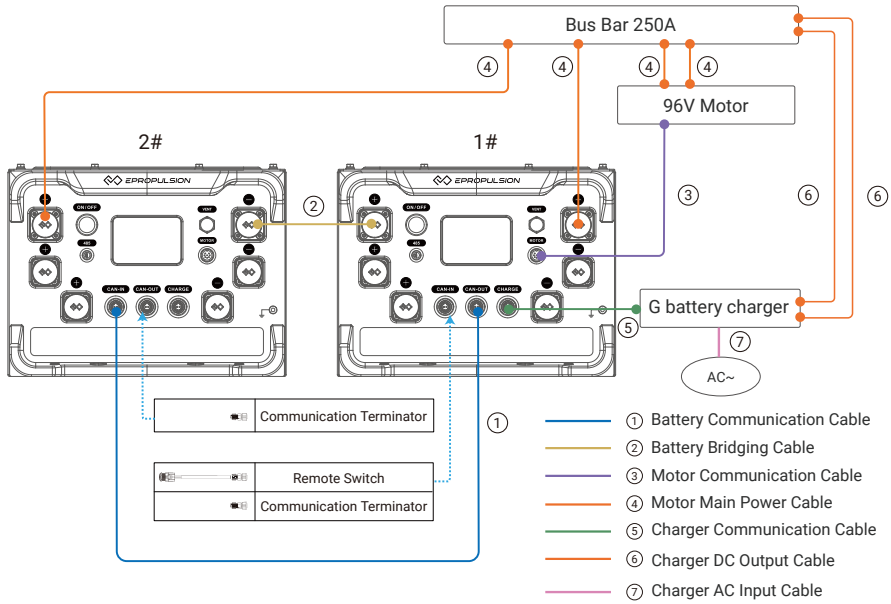


Figure 2-4

⚠ The max continuous discharge current of the E100 battery is 150A. Only the machine with load current less than this value can be connected.

⚠ If the discharging current is exceeded, the fuse of the battery may be blown.

2.4.3 Turning on/off the connected batteries in series

⚠ When E100 batteries are used in series, only press the power switch on the 1# battery (the battery connected to the machine) to check the battery status.

2.4.4 Check battery status using the battery power switch/remote switch

⚠ The power switch for the E100 batteries connected in series is only provided to check the battery status if the batteries are not connected to the whole ship system.

1. To turn on the battery, press the key switch/remote switch on 1# battery, press the key for 1S (shall not exceed 3S), the LED display screen lights up, you can release the key, the battery power on self-test, the LED display screen stays on for 5 seconds with no error reported, indicating that the battery status is normal.

2. When shutting down the battery, check that the battery is not connected to the whole boat system, press and hold the power switch/remote switch on the battery for 3 seconds then release, the battery will be automatically disconnected and the LED display screen will turn off.

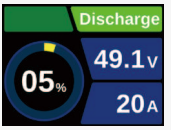
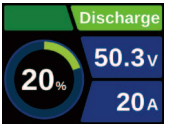
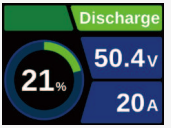
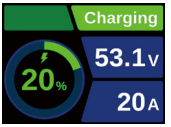
2.4.5 Battery control using control devices

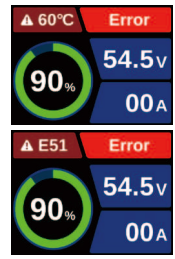
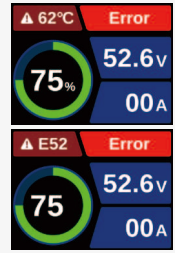
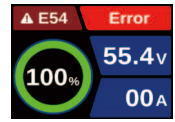
1. When the battery is turned on, press the switch of the remote operation/near operation and other control devices, the indicator or display of the control devices will light up, and the LED display screen on the battery will also light up, and it will not go out for 5s and will not report an error, indicating that the system power supply is successful.

2. When the battery is turned off, press the switch of the control device such as remote operation/near operation, the battery is automatically disconnected, the indicator or display of the control device goes off, and the LED display screen on the battery also goes off.

After the battery is powered on, the battery's BMS and relay will consume the power of the battery itself. When the battery is not used for a long time, please turn off the battery power in time.

2.5 LED display screen

Battery Status	Description	Fault Code	Detail	Figure	Alarm	Running
Shut-down	Display lights off	/	/	/	/	×
Dis-charging	Battery level alarm 1	/	Battery level 0~5%		/	√
	Battery level alarm 2	/	Battery level 6~20%		/	√
	Normal battery level	/	Battery level 21~100%		/	√
Charging	The lightning icon flashes and the SOC font turns green	/	Battery level 0~100%		/	√

Battery Condition	Description	Error Code	Detail	Figure	Alarm	Running
Warning	Charging over temperature alarm, volatge alram, voltage alarm	/	Tem-perature and error code show alternately		√	×
	Discharging over temperature alarm	/			√	×
	Charging over volatge alram	E54	/		√	×
	Discharging under voltage alarm	E55	/	elow are similar	√	×
	Battery over current alarm	E57	/	/	√	×
	Relay sticking fault	E62	/	/	√	×
	Fuse blown fault	E63	/	/	√	×
	Parallel fault	E64	/	/	√	×

2.6 Buzzer

Buzzer status	Description
Buzzer continues to beep for 8 seconds and then silence	Battery alarms, please refer to Section 2.5 and Section 3 for troubleshooting

3 Troubleshooting

Error code	Description	Solution
E54	Overvoltage	1. Check whether the battery is fully charged. If the battery is fully charged, it is normal for the battery to overvoltage. 2. If the battery is not fully charged, but over-voltage protection occurs, please contact an authorized ePropulsion dealer.
E51/ E52	Charge/discharge over temperature	1. Disconnect the charger/machine. 2. If the temperature is too high, cool the battery. After the temperature decreases, restart the battery. Please operate the battery at a suitable temperature. 3. If the temperature is too low, please use the battery at an appropriate temperature. 4. If the fault persists, please contact an authorized ePropulsion dealer.
E55	Discharge undervoltage	1. Stop discharging. 2. Charge the battery. 3. If the fault persists, please contact an authorized ePropulsion dealer.
E57	Discharge overcurrent	1. Disconnect the machine. 2. Restart the battery, and check. If the fault persists, please contact an authorized ePropulsion dealer. If the fault does not persist, check the external circuitry for short-circuits or whether to connect with the high-current load. 3. If the fault persists, please contact an authorized ePropulsion dealer.
	No response by pressing the power button	1. Read the user manual, and confirm whether the operation is correct. 2. If the fault persists, please contact an authorized ePropulsion dealer.
	The battery has no input or output	1. Check the connection between the battery, charger and the machine. 2. Reconnect the communication cables and power cables. 3. Disconnect the machine or charger, and reconnect after a while. 4. Contact an authorized ePropulsion dealer.

E63	Fuse fault	1. Check whether the battery and external cable are short-circuited 2. If there is no short circuit, disconnect all connections to the battery. Then restart the battery after a while, and see if the fault persists. 3. If the fault persists, please contact an authorized ePropulsion dealer.
E62	Relay fault	1. Check if the battery is connected with other devices. 2. Disconnect all connections to the battery. Then restart the battery after a while, and see if the fault persists. 3. If the fault persists, please contact an authorized ePropulsion dealer.
E65	Calbe fautl	1. Disconnect all connections to the battery. Then restart the battery after a while, and see if the fault persists. 2. If the fault persists, please contact an authorized ePropulsion dealer.
	Other faults	1. Disconnect all connections to the battery. Then restart the battery after a while, and see if the fault persists. 2. If the fault persists, please contact an authorized ePropulsion dealer.

4 Transportation and Storage

4.1 Transportation

- 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 battery to the sun or rain during transport.
- Check applicable local, national or international laws and regulations before transport.

The below figure displays how to pack the battery with ePropulsion original packing material. For long-distance transport, it's recommended to apply ePropulsion original package to pack the outboard before delivery.

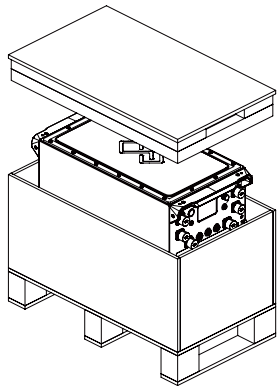


Figure 4-1

4.2 Storage

- When the battery is not in use, make sure that the battery's connectors are covered well with the waterproof caps.
- Disconnect all connections to the battery and check that all connectors are clean.
- Before storage, make sure the battery level is around 45%~50%, and stored at an ambient temperature of 15°C ~ 25°C, relative humidity not more than 75%, clean, dry and ventilated place, to avoid contact with corrosive contact, away from fire and heat sources.
- Protect against moisture, dust, water, shock and heat.
- Every 3 months of storage, the battery should be recharged with an appropriate ePropulsion charger.

5 Routine Maintenance

Various factors like operation environment (such as temperature, humidity, dust, etc.), aging and wear of internal components, will increase the possibilities of battery failure. In order to avoid this, keep your battery in optimal operating state, and eventually extend the service lifespan of the battery. Therefore, routine maintenance is very important.

- Before long-term storage, please disconnect the communication cable and the power cable between batteries and machines.
- Before the first time use or reuse after long-term storage, charge the battery to its full capacity in order to achieve the best performance. Only use ePropulsion charger designed for E100 Battery to charge the battery. Other chargers may lead to reduced battery capacity, premature battery failure, fire or explosion. Avoid over-charging, which may cause fire or explosion.
- Use the battery in moderate temperature to avoid negative effects of extreme temperature posed on battery lifespan and useful cycles.
- If a fault occurs, deal with the problem in a timely manner to avoid any further damage. If necessary, consult the ePropulsion authorized dealer for repair or parts replacement.
- During storage, strictly follow the instructions in Section 4.2 Storage. Pay special attention to the residual charge and check the battery state in a regular manner.
- Use a clean & dry towel to keep the battery surface away from oil, dirt and water. Avoid touching metal contacts. All the contacts need to be kept clean for best performance.
- To improve functionality and prolong lifespan of the battery, avoid direct sunshine or radiation exposure. Meanwhile, avoid liquid, dust or dirt entering the battery.
- Do not leave the battery at a low state of charge.
- It is advised to check the battery state of charge on a regular basis.
- Clean all electrical contacts with electrical contacts cleaner, e.g. WD40, every two months, and clean immediately once there is rusty show up or splashed with sea water. And for long-term storage, please use conductive gel to protect electrical pins.

6 Limited Warranty

Disclaimers

All information and specifications contained in this manual are based on the latest information available at the time of publishing. The actual product may differ. Moreover, because of our continuous product improvement policy, we may modify information and/or specifications to explain and/or exemplify a product, service or maintenance improvement without reducing the performance or quality of products that already been purchased. We reserve the right to make any changes at any time without notice.

All Rights Reserved

6.1 Introduction

Congratulations on the purchase of your new ePropulsion Product! We are happy to welcome you to the ePropulsion family! ePropulsion has been deeply involved in the field of marine new energy power for more than ten years, focusing on the research and development, manufacturing and sales of marine electric/hybrid propulsion systems and core components, and has full-chain system integration service capabilities and rich engineering design experience. The main business covers propulsion equipment with a power of 500 watts to 1000 kilowatts, supporting controllers, batteries, main motor remote control systems, energy management systems and smart ship solutions. It is committed to promote the upgrade of marine power systems to new energy and is an industry-leading leader worldwide in marine electric propulsion technology. ePropulsion wants you to enjoy your new ePropulsion product for many years to come and asks you to read and understand the manual before you operate the propulsion to ensure that you follow safe operating practices and maintenance procedures.

This manual should be considered a permanent part of the ePropulsion product and shall remain with it. For correct maintenance, repair and genuine parts, visit an ePropulsion authorized distributor/dealer. Your ePropulsion authorized distributor/dealer is always up to date regarding the latest news and technology and is able to answer all your questions

concerning your ePropulsion product. You can locate your nearest ePropulsion authorized distributor/dealer by visiting the website of ePropulsion https://www.epropulsion.com/contact/find-a-dealer.

Before installing or using your ePropulsion product, please read and understand this manual and the applicable Operation Manual carefully. If you did not receive an **Operation Manual**, please download a copy from https://www.epropulsion.com/service/download-center.

6.2 Limited Warranty

6.2.1 Overview

Guangdong ePropulsion Technology Limited, Room 801, Building 1; 11 Daxue Road, Songshan Lake; CN Dongguan Guangdong Province ("ePropulsion"), provides this Limited Warranty manual to help you take full advantage of your electric propulsion product and its intelligent integrated system product for boats produced by ePropulsion ("ePropulsion Product").

ePropulsion warrants that at the time of shipping, new ePropulsion Products sold by ePropulsion and/or its authorized distributors/dealers will be free from defects in material and workmanship during the limited warranty period specified in Section 2.4. A defect exists if the actual condition of the ePropulsion Product differs from the agreed condition or the published specifications.

This Limited Warranty is applicable in all countries and can be enforced in any country or region where ePropulsion or its authorized distributors/dealers provide ePropulsion Products subject to the terms and conditions set forth in this Limited Warranty. This Limited Warranty is subject to all applicable national export and import laws and regulations.

This Limited Warranty is subject to limitations referred to in Section 2.3 and 2.8.

ePropulsion warrants to the first purchaser who buys the ePropulsion Product to use it (“First Purchaser”) that it will make the repairs or replacements necessary to correct defects for the limited warranty period specified in Section 2.4. If the ePropulsion Product is transferred to another purchaser during the limited warranty period, it is suggested that the second purchaser notify ePropulsion in text form (e.g. email to service@epropulsion.com) at the time the second purchaser takes possession of the ePropulsion Product.

Unless expressly stated otherwise in this Limited Warranty, all provisions herein apply exclusively to consumers using ePropulsion Products for recreational use unless otherwise stipulated in Section 2.4 (1) and 2.5. ePropulsion Products used for commercial or professional purposes (with the exception of light commercial use as defined in Section 2.4(2)) are not covered by this Limited Warranty; instead, the statutory warranty in your jurisdiction applies. We recommend consulting an ePropulsion authorized distributor/dealer to clarify the applicable warranty

coverage before using the ePropulsion Product for such purposes.

This Limited Warranty does not affect any mandatory statutory rights you may have under the laws of the country in which you have your habitual residence, including any rights or claims you may have under your purchase contract with the ePropulsion authorized distributor/dealer from whom you purchased the ePropulsion Product. The assertion of these statutory rights in the event of defects is free of charge and is not restricted by this Limited Warranty.

6.2.2 Product Registration

ePropulsion Products are Single Products, eSSA System Products and their accessories, as listed in the table below. This limited warranty period applies to all ePropulsion Products and their accessories.

Product Type	Specific Product Series
Single Products	eLite series, Spirit series, Navy series, Pod drive series, E batteries series, accessories
eSSA System Products	X series, P eSSA series, I series, G batteries series

In order to obtain your ePropulsion Product Limited Warranty and to receive quick support for service, parts and technical documentation, ePropulsion strongly recommends that you submit an online product registration via https://www.epropulsion.com/service/product-registration within (30) days after you have purchased the ePropulsion Product. The following information is required to register the ePropulsion Product:

- Product Model:
- Product Serial Number (SN):
- Purchase Date:
- Owner Information (Name, Address, Email/Phone):
- Boat Information (Model, Boat Type, Application, Propulsion Type):
- Dealer Information (Dealer Name, Contact Person, Email/Phone)

The benefits of registering your ePropulsion Product include:

- It confirms that you are the legal owner.
- warranty claims can be processed more quickly.
- if necessary, the ePropulsion Service Network can communicate directly with you.
- you have the option to sign up for ePropulsion latest news, keeping you up to date on new ePropulsion Products and features.
- other benefits that are published on the ePropulsion website, including but not limited to warranty extensions (please refer to the ePropulsion website for specific information).

Personal data shall be collected, processed and used by ePropulsion exclusively for the purpose of performing and managing this Warranty Policy, including but not limited to verifying your eligibility for warranty coverage, processing warranty claims (e.g., repair, replacement or maintenance requests for the warranted product), communicating warranty-related information (such as notifications of warranty status, product safety updates or progress of warranty service), and fulfilling other obligations under this Limited Warranty. For detailed information on ePropulsion's personal data protection please refer to ePropulsion's Privacy Policy at https://www.epropulsion.com/privacy-policy/.

6.2.3 Important Limitations

This Limited Warranty applies only to ePropulsion Products manufactured by ePropulsion and sold by ePropulsion or its authorized distributors/dealers. It only applies if the ePropulsion Product is installed and commissioned in accordance with the respective ePropulsion Product installation and operation guidelines contained in the user manual and used and maintained in accordance with the respective ePropulsion user manual. **For eSSA System Products, installation and commissioning must be performed by an ePropulsion authorized distributor/dealer.**

If a defect arises within the limited warranty period, ePropulsion may, at its discretion, choose to repair or replace the ePropulsion Product or part. ePropulsion will undertake the repair or replacement without charge for parts or repair labour. Repair labour includes the cost of labour to remove and reinstall the ePropulsion Product and, if necessary to complete the warranty service, to replace the non-ePropulsion Product components of the vessel in which the ePropulsion Product is installed.

Please note that ePropulsion Products are sophisticated and complex machinery that may be affected by many variables associated with their application. As such repairs may require multiple attempts and may take significant time (up to three (3) months) from the date on which ePropulsion or its authorized distributor/dealer confirms receipt of the defective ePropulsion Product. The repairing time shall delete the duration of waiting time includes waiting time because of customer's delay, statutory/public holidays and force majeure.

After the limited warranty period has expired, you can still enjoy maintenance services from ePropulsion authorized distributors/dealers. In this case, service and accessories fees apply. These fees are based on the rates quoted by the ePropulsion authorized distributor/dealer.

6.2.4 Warranty Periods

The limited warranty period begins on the date of receipt of the ePropulsion Product by the First Purchaser. For the **eSSA System Products**, the limited warranty period **begins on the date of commissioning** the ePropulsion Product approved by ePropulsion.

The warranty periods for ePropulsion Products vary significantly based on the nature of their use, namely commercial use and non-commercial use (which encompasses recreational use and light commercial use).

(1) Warranty Periods for Recreational Use

"Recreational use" means the use of the ePropulsion Product for personal leisure, entertainment, or hobby-related activities, without any intent to generate income or profit. This use is limited to the user, their family, or a small group of non-paying friends. For example:

1. using an ePropulsion-equipped boat for a weekend fishing trip with family members, provided that no one is engaged in fishing for commercial sale;
2. participating as a hobbyist in a local, non-competitive boating event, using an ePropulsion Product to power the boat.

- **Single Products:** Twenty-four (24) months or 1000 hours (whichever comes first) from the date of receipt of the ePropulsion Product by the First Purchaser, or the limited warranty period you obtained when you registered your ePropulsion Product, whichever is longer.
- **eSSA Products:** Twenty-four (24) months or 1000 hours (whichever comes first) from the date of sea-trial delivery and commissioning. The limited warranty period shall not exceed twenty-six (26) months or 1015 hours (whichever comes first) from the date the First Purchaser receives the ePropulsion eSSA System Product.

(2) Warranty Periods for Light Commercial Use

"Light commercial use" means the use of the ePropulsion Product in activities that are non-profit driven, public welfare oriented, or to support of community-focused initiatives. Such use is usually carried out by non-commercial organizations and may serve public interest, educational or research purposes.

- **Single Products:** Twenty-four (24) months or 1000 hours (whichever comes first) from the date of receipt of the ePropulsion Product by the First Purchaser, or the limited warranty period you obtained when you registered your ePropulsion Product, whichever is longer.
- **eSSA Products:** Twenty-four (24) months or 1000 hours (whichever comes first) from the date of sea-trial delivery and commissioning. The limited warranty period shall not exceed twenty-six (26) months or 1015 hours (whichever comes first) from the date the First Purchaser receives the ePropulsion eSSA System Product.

(3) Warranty Periods for Commercial Use

"Commercial use" means any utilization of the ePropulsion Product in activities primarily intended for generating income or profit or otherwise carried out in support of a business operation. For example:

1. using ePropulsion Product in a commercial fishing enterprise where the catch is sold for profit;
2. incorporating ePropulsion Products into a tour-guiding business that offers paid boating tours.

- **Single Products:** Twelve (12) months or 1000 hours (whichever comes first) from the date of receipt of the ePropulsion Product by the First Purchaser, or the limited warranty period you obtained when you registered your ePropulsion Product, whichever is longer.
- **eSSA Products:** Twelve (12) months or 1000 hours (whichever comes first) from the date of sea-trial delivery and commissioning. The limited warranty period shall not exceed fourteen (14) months or 1015 hours (whichever comes first) from the date that the First Purchaser receives the ePropulsion eSSA System Product.

Any ePropulsion Product or part repaired or replaced under the Limited Warranty assumes the remaining limited warranty period or ninety (90) days, whichever is longer. If only parts are replaced under warranty, the 90 days warranty covers the replaced parts only, the ePropulsion Product itself will remain the original warranty period). Any original part of an ePropulsion Product (except for consumable parts) purchased separately by the customer is covered by a limited warranty period of ninety (90) days.

If the ePropulsion Product is transferred to another purchaser during the limited warranty period, the remaining limited warranty period is transferred to that purchaser. The transfer of this Limited Warranty will not extend its duration. Warranty coverage that has not yet expired cannot be transferred to or from a customer using the product for commercial purposes.

6.2.5 Non-commercial Use

The Limited Warranty applies only to ePropulsion Products purchased by consumers and used solely for recreational purposes and not for any commercial application.

Insofar as the ePropulsion Product is used by consumers for light commercial use, the limited warranty shall apply mutatis mutandis, whereby the limited warranty periods in Section 2.4 (2) in this manual shall apply for possible warranty coverage.

6.2.6 Commercial Use

In case of commercial use as defined in Section 2.4(3), any commercial contract (including but not limited to the Product Sales Contract or the Purchase Agreement) entered into between the commercial customer and ePropulsion or its authorized distributor/dealer, the warranty terms in the commercial contract shall prevail over this Limited Warranty, if the commercial contract stipulates warranty terms. For all warranty matters beyond the scope of the commercial contract, the provisions of this Limited Warranty shall apply.

6.2.7 Warranty Procedures

If you believe your ePropulsion Product is defective, you must contact an ePropulsion authorized distributor/dealer within fifteen (15) days after discovering the defect. Your authorized distributor/dealer will provide you with the contact details (name, address and telephone number) of the designated service facility.

You are responsible for transporting your ePropulsion Product to and from the designated service facility. Any delivery or transportation costs incurred in the process shall be borne by you, except where such costs arise in connection with the assertion of your statutory rights under the applicable sales contract. In certain cases, your ePropulsion authorized distributor/dealer may, at ePropulsion's sole discretion and subject to prior agreement, arrange for the inspection and/or repair to be performed on-site.

The following procedures must be followed to make a warranty claim:

1. Contact your nearest ePropulsion or ePropulsion authorized distributor/dealer. They will inform you whether the defect is covered by this Limited Warranty or their own warranty and provide the contact details (name, address and telephone number) of the designated service facility.
2. Provide proof of first purchase (e.g., receipt or invoice showing ePropulsion Product, date and the serial number) or commissioning (e.g. the form that shows the commissioning date). Product labels must be kept intact. Claims are valid only if the information provided is correct, genuine, and complete. If you have registered the ePropulsion Product on the official website, proof of first purchase or commissioning is not necessary.
3. Use the original box and packaging material of the ePropulsion Product for transport or equivalent packaging and packaging material for sending the ePropulsion Product to the designated service facility. Pack the ePropulsion Product in such a way that any damage caused by improper packaging during transport is avoided (e.g. by using sufficient padding). ePropulsion is not liable for any damage caused by improper packaging during transport. In certain cases, instead of shipping the products back, on-site service will be managed.
4. Keep defective items available for inspection by ePropulsion or an ePropulsion authorized distributor/dealer for the duration of the inspection. You can request the return of the ePropulsion Product. ePropulsion will arrange the return. If ePropulsion replaces the

ePropulsion Product or part of the ePropulsion Product, the replacement becomes your property and the ePropulsion Product or the part of the ePropulsion Product that is replaced, becomes the property of ePropulsion.

5. ePropulsion or the ePropulsion authorized distributor/dealer will conduct diagnosis and examination on the defective ePropulsion Product to verify the validity of the warranty claim:
    - If your warranty claim is accepted, the ePropulsion Product or its defective parts will be repaired or replaced free of charge.
    - If your warranty claim is rejected, you will receive an estimate for repair/replacement of the ePropulsion Product, including the costs of round-trip delivery. ePropulsion or the ePropulsion authorized distributor/dealer will only begin the work after receiving your written confirmation.

Any action arising hereunder must be commenced within one (1) year after the cause of action accrues, unless you are a consumer, in which case a statutory limitation period of two (2) years applies. Any actions commenced after this period shall be barred.

6.2.8 Excluded from the Limited Warranty

In addition to the other conditions and limitations set forth in Section 2.3, the following items are specifically excluded from any coverage under this Limited Warranty:

1. Ordinary wear and tear (e.g. aging of sealing rings, fading of external appearance, reduction in display screen brightness, battery capacity attenuation, decrease in cruising range; loose interfaces that still enable normal connection).
2. consumable parts (e.g. propeller, anode).

This Limited Warranty does not cover any defect, damage, cost, or consequence resulting from:

1. Use not in accordance with the Operation Manual or intended use described therein. This includes:

- Wilful abuse, misuse, negligence or accidents,
- physical damage (including overcharging or over discharging),
- installation, handling, operation, or maintenance inconsistent with the instructions in the
- Operation Manual,
- failure to perform the required maintenance,
- delay of more than two (2) months in claiming the repair of the ePropulsion Product despite being aware of the defect,
- racing or engaging in a contest of speed or endurance,
- use of non-approved attachments, non-genuine parts, or spare parts of non-equivalent quality,
- incorrect software settings or unauthorized modifications to software,
- incorrect storage, e.g. long storage resulting in battery failure, dried/cracked rubber components, or corrosion of electrical contacts/connectors,
- not performing and paying for regular maintenance and failing to maintain records of all service and maintenance,
- running aground, incorrect propeller matching, or similar operation against the Operation Manual,

2. unauthorized modification, repair or tampering of

- the ePropulsion Product, accessory, or part (including removal or alteration of the ePropulsion Product label or the serial number),
- the power, control, or electrical system,
- service performed by a non-authorized facility,

3. environmental exposure, e.g.

- rust or corrosion in electrical contacts or connectors,
- submersion or exposure to unsuitable environmental conditions, such as high humidity, heavy rainfall, seawater intrusion, or freezing of the cooling water,

4. parts and repair costs of failure due to misdiagnosis,
5. damage due to improper packing during transport,
6. repairs outside normal working hours,
7. service-related costs such as installation, disassembly, financing, rental, or similar costs,
8. non-compliance with applicable laws and regulations governing the transport or packaging of lithium batteries (classified as a UN9 hazardous items), and
9. for commercial customers (B2B) only, transporting the ePropulsion Product, part, or vessel in which the ePropulsion Product is installed, to and from the designated service facility (including any haul-out fees or storage fees).

In all warranty claims, ePropulsion will only bear the costs of diagnosing, repairing, or replacing a defective part. In no event shall ePropulsion or ePropulsion Authorized Distributor/dealer be liable for incidental, special or consequential damages. Such damages include, but are not limited to, loss of profits, haul-out fees, launching costs, towing, storage, slip fees, insurance coverage, loan payment, transportation costs, telephone charges, and mileage.

6.3 Miscellaneous

- Except as modified in writing and signed by the parties, and except where a commercial contract expressly provides otherwise, this Limited Warranty is and shall remain the complete and exclusive agreement between the parties with respect to warranties, superseding all prior written or oral agreements, and all other communications between the parties relating to warranties.
- No original equipment manufacturers, boat builders, ePropulsion product installers, distributors, dealers or any other person or entity has any authority to make any representation or promise on behalf of ePropulsion or to modify the terms or limitations of this Limited Warranty in any way, whether orally or in writing.
- This Limited Warranty is subject to German law, excluding the United Nations Convention on Contracts for the International Sale of Goods (CISG). The courts in Germany shall have exclusive jurisdiction. If you are a consumer and have your habitual residence in the EU, you may also bring your claim in the country in which you live and you additionally enjoy the protection afforded to you by the mandatory provisions of the law of your country of residence.

WARRANTY CARD ePropulsion Control System

(*In order to validate warranty, please fill in this form first and read the Warranty Policies.)

|| **OWNER INFO.** ||

Owner Name			
Address			
Phone		**Email**	

|| **DEALER INFO.** ||

Store Name			
Address			
Phone		**Email**	

|| **PRODUCT INFO.** ||

Date of Purchase (mm/dd/yyyy)	
Serial No.	

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.

Guangdong ePropulsion Technology Limited
Website: www.epropulsion.com
E-Mail: service@epropulsion.com