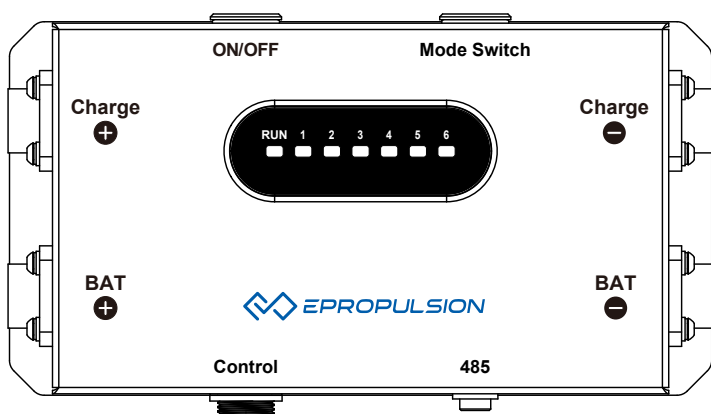


E Battery External Controller



MODEL: BEC4850
Suitable for E Battery

2024.08 Version 1.0

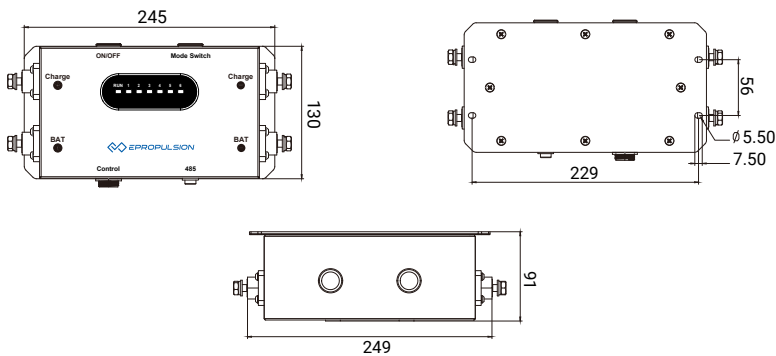
Copyright © ePropulsion Technology Limited

Introduction

Thank you for purchasing ePropulsion E Battery External Controller.

This Controller is specially designed for E Battery and E Battery Solar Charger.




Interface description



Specifications

| | |
|-----------------|-------------------|
| Voltage range | 41.6 - 57.6 VDC |
| Maximum current | 50A |
| Weight | 2300 g |
| Dimensions | 245 x 130 x 91 mm |

Notes

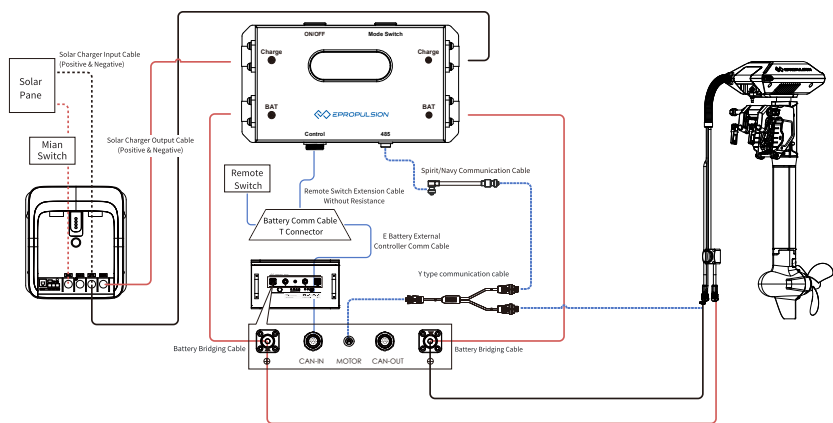
-  Do not reverse the positive and negative poles of the External Controller.
-  Before connecting the External Controller with the third party product, please contact ePropulsion authorized distributor.
-  If the E battery is charged by the solar charger without a communication cable, it may not be fully charged to 100%.

Packing List

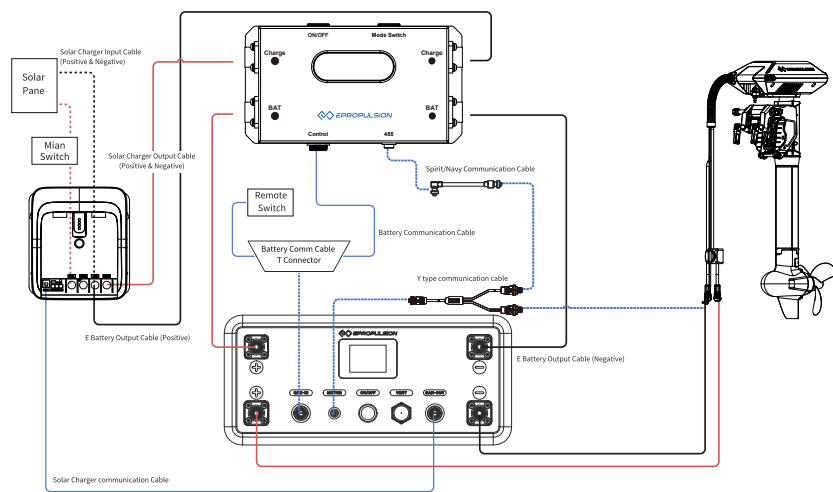
| Item | Qty. |
|--------------------------------------|-------|
| E Battery External Controller | 1 pcs |
| E Battery External Controller Manual | 1 pcs |

Operations

Connect E40/E80/E175



Connect E60/E163





For different E battery connections, you will need to purchase the following additional materials:

| Connection | Item | | NO. | Qty | Note |
|--------------------------|--|------------|------------|-----|---|
| Connect E40/E80/ E175 | Battery Remote Switch 5m | | EB-AC02-01 | 1 | To connect the remote switch, you need to prepare |
| | Battery Comm Cable T Connector | | EB-AC05-00 | 1 | |
| | Remote Switch Extension Cable Without Resistance | | / | 1 | It is needed to connect the remote switch, which is included in the E Battery Solar Charger 48V 1600W |
| | E Battery External Controller Comm Cable | | 00-0601-50 | 1 | |
| | Spirit/Navy Y Type Communication Cable 0.3m | | 00-0601-12 | 1 | / |
| | Spirit/Navy Communication Cable | | 00-0601-01 | 1 | / |
| | Battery Bridging Cable | 0.5m | 00-0601-28 | 2 | / |
| 1.0m | | 00-0601-29 | | | |
| 2.0m | | 00-0601-30 | | | |
| Connect E60/E163 | Battery Remote Switch 5m | | EB-AC02-01 | 1 | To connect the remote switch, you need to prepare |
| | Battery Comm Cable T Connector | | EB-AC05-00 | 1 | |
| | Solar Charger communication Cable | | / | 1 | Included in the E Battery Solar Charger 48V 1600W |
| | E Battery Output Cable (Positive & Negative) | 1.5m | EB-CP04-00 | 1 | / |
| | Spirit/Navy Y Type Communication Cable 0.3m | | 00-0601-12 | 1 | / |
| | Spirit/Navy Communication Cable | | 00-0601-01 | 1 | / |

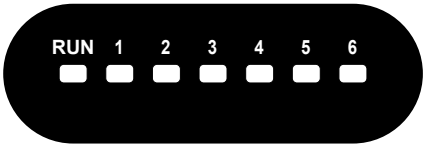
1. Connecting to E Battery, E Battery Solar Charger and NAVY.
2. For turning on the controller, please press and hold the power button on the controller for 1 second (no more than 3 seconds). In this case, the controller is in Standby Charge Mode by default.



You can also turn on the system using the power button on the battery or the remote switch. In this case, the controller is in No Control Mode by default.

3. For switching modes of the controller, please press and hold the mode switch button on the controller for 1 second (no more than 3 seconds).
4. For turning off the controller, please press and hold the power button on the battery for 3 seconds, then the system will turn off automatically.

LED Indicator



| Item | Indicating method | Description |
|------|--------------------------|---|
| RUN | / | The steady light is for the controller to work, the flash light is for the battery communication lost |
| 1 | No Control Mode | Turn on the system using the power button on the battery or the remote switch. In this mode, the controller will not control the system. |
| 2 | Standby Charge Mode | Keep the battery power on until the battery is fully charged and automatically turn off the battery, In this mode, when the charging current is less than 2A and exceeds 10 minutes, the controller will control the battery to shut down for 1 hour and then restart to detect the charging current. When the charging current is greater than 2A, the controller will keep charging. The system will shut down when the battery is fully charged. |
| 3 | Standby Discharge Mode A | Turn the battery on to discharge for 1 hour and then turn it off for 1 hour, repeating the cycle until the battery is less than 10%. |
| 4 | Standby Discharge Mode B | Turn the battery on to discharge for 3 hours and then turn it off for 6 hours, repeating the cycle until the battery is less than 10%. |
| 5 | Standby Discharge Mode C | Turn the battery on to discharge for 6 hours and then turn it off for 12 hours, repeating the cycle until the battery is less than 10%. |
| 6 | Standby Discharge Mode D | Turn the battery on to discharge for 8 hours and then turn it off for 24 hours, repeating the cycle until the battery is less than 10%. |

Notes



If you want the battery to be fully charged and automatically shut down to save power, please switch to the Standby Charge Mode before leaving the boat.



If you want the battery to automatically turn on and use electricity, please switch to the Standby Discharge Mode before leaving the boat.

Warranty

ePropulsion E Battery External Controller is guaranteed against any manufacturing defects for TWO years from date of delivery of products to end customers.

Free warranty is only validated upon the presentation of legal serial number, Warranty Card, and evidence of purchase from an authorized ePropulsion dealer.

Conditions

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.

The warranty is valid only when the information is correct and complete.

Warranty does not cover

Minor faults producing no influence on the intended function of the product.

Faults resulting from any improper operation that contradicts the user manual.

Accessories supplied with the product.

Damage caused by accident, misuse or unauthorized repair.

Damage caused by dropping, improper care or storage.

If warranty expires, users can still enjoy maintenance services from ePropulsion authorized dealers with minimum maintenance charge.

WARRANTY CARD

(*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

Webseite: www.epropulsion.com

E-Mail: service@epropulsion.com