

Spirit External Battery Cable to E-Series Battery Ultra 4.5m

INSTALLATION MANUAL

1. Important Safety Instructions

Before first use, please ensure you have read the user manual for your outboard motor and fully understand the potential risks associated with operating the equipment.

- ⚠ Life jackets must be worn before starting the outboard motor. Secure the kill switch wristband to your wrist or life jacket.
- ⚠ Check remaining battery charge before use.
- ⚠ Remove the kill switch after stopping the outboard motor. Rinse all submerged or splashed outboard components with fresh water after each use.

This product is a dedicated harness designed to connect the ePropulsion outboard motor (Spirit 2 shown) with the E-Series battery. It refers to the component circled in Figure 1-1.

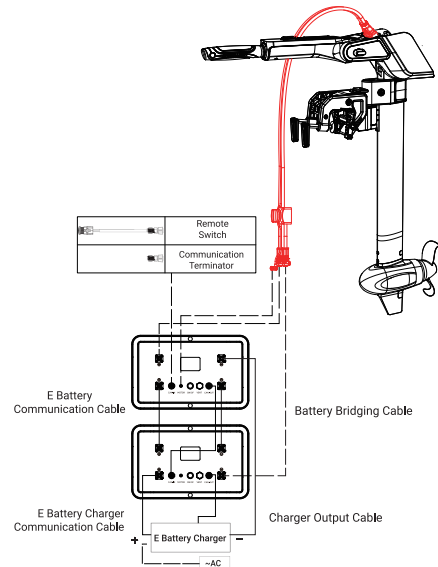


Figure 1-1

2. Installation Steps

2.1 Connecting Cable Connectors

This cable is shown in Figure 2-1. The left end of the cable features a connector for connecting to the outboard motor, while the right end features a connector for connecting to the E battery.

1. Connecting the E battery: Connect the connector plug at the right end of the cable to the socket on the E battery according to the color markings, and plug them together.
2. Connecting to the Outboard Motor: Connect the connector plug at the left end of the cable to the socket on the outboard motor by following the steps shown in Figure 2-2.

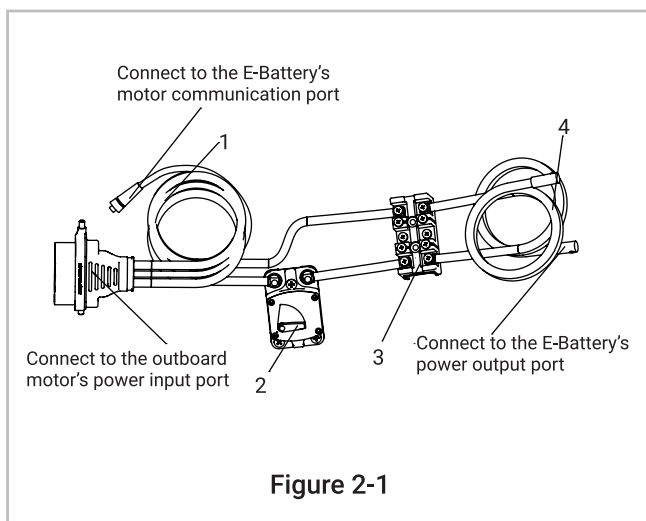


Figure 2-1

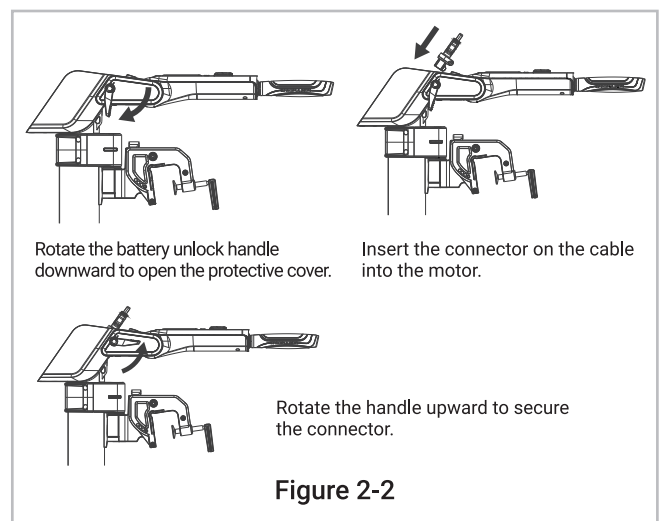


Figure 2-2

2.2 Installation and Securing of Cable Components

1. Secure the circuit breaker: Use 3 M5 self-tapping screws, or 3 sets of M5 screws with M5 nuts, to secure the circuit breaker in the designated position, as shown in Figure 2-3;

- Secure the terminal adapter: Use 2 M5 self-tapping screws, or 2 sets of M5 screws with M5 nuts, to secure the terminal adapter in the designated position, as shown in Figure 2-4.

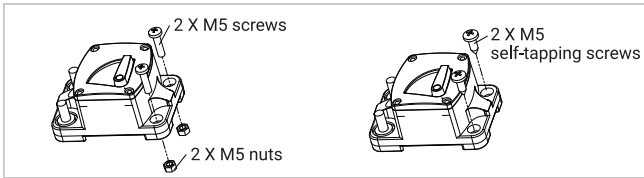


Figure 2-3

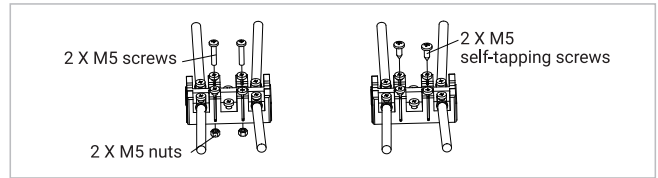


Figure 2-4

3. Circuit Breaker Operation and Instructions

- Basic Operation:** The front of the circuit breaker is shown in Figure 3-1. Move the yellow RESET handle to the “OFF/TRIP” position to disconnect the DC 48V positive connection between the propeller and the battery; move it to the “ON” position to restore the connection.
- Wiring Instructions:** The circuit breaker’s terminals are labeled “LINE” and “LOAD.” The “LINE” terminal should be connected to the positive terminal of the DC 48V battery, and the “LOAD” terminal should be connected to the DC 48V positive power cable of the outboard motor. (This connection is pre-wired at the factory. If the wiring was disconnected during installation, be sure to reconnect it according to these instructions.)
- Fault Protection:** If an abnormal overload or short circuit occurs in the DC 48V circuit, the circuit breaker will automatically trip, and the yellow RESET handle will snap from the “ON” position to “OFF/TRIP.” At this point, wait approximately **1 minute** and ensure the circuit issue has been resolved before resetting the handle from “OFF/TRIP” back to the “ON” position.

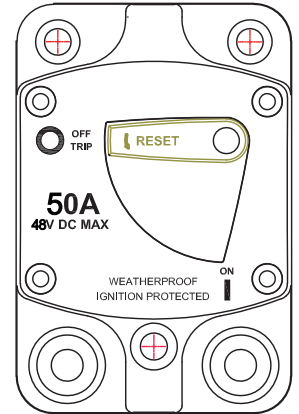


Figure 3-1

4. Pre-Power-On Inspection

Before turning on the power, be sure to perform the following checks:

- Check Fasteners:** Inspect the screws and nuts securing the circuit breaker to the terminal block for looseness. If any are loose, tighten them using an adjustable wrench or screwdriver. The locations of the screws and nuts are marked in Figure 4-1.
- Check the circuit breaker status:** Ensure the yellow RESET handle on the circuit breaker is pointing to the “ON” position. Please note that you must use a battery with a pre-charge function (refer to your outboard motor manual for specific requirements), and you must set the circuit breaker handle on this cable to the “ON” position before connecting the battery.
- Check connections and environment:** Verify that the connectors at both ends of the cable are securely mated to the outboard motor and battery. Ensure the cable is free of damage and that the installation environment is dry. If any abnormalities are detected, do not power on; be sure to resolve the issue before proceeding.

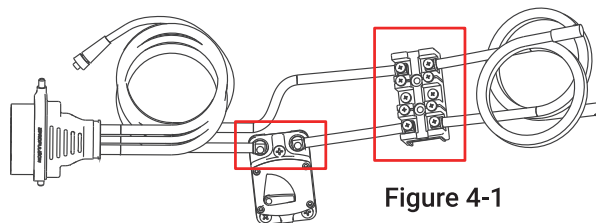


Figure 4-1

Appendix

Refer to Figure 2-1 for the list of parts:

No.	Part No	Item	Specifications
1	SU-AC13-00	Spirit Ultra External Battery Cable 3m	Length: 3 meters, M10 copper lugs
2	SU-AC14-00	48V Waterproof Circuit Breaker (50A)	M8 terminals, includes 2 red cap covers
3	SU-AC15-00	Terminal Adapter	M6 terminal screws
4	EB-CP04-00	E Battery Output Cable 1.5m (Positive & Negative)	Length: 1.5 meters, M8 copper lugs