Quick Installation Guide

—— BMS Parallel Box-II

III Installation Prerequisites

Ensure that the installation location meets the following conditions:

- The building is designed to withstand earthquakes
- The location is far from the sea to avoid salt water and humidity, over 0.62 miles
- The floor is flat and level
- There are no flammable or explosive materials, at a minimum of 3ft
- The ambience is shady and cool, away from heat and direct sunlight
- The temperature and humidity remains at a constant level
- There is minimal dust and dirt in area
- There are no corrosive gases present, including ammonia and acid vapor
- Where charging and discharging, the ambient temperature ranges from 32°F to 113°F

In practice, the requirements of battery installation may be different due to enviroment and locations.
In that case, follow up the exact requirements of the local laws and standards.

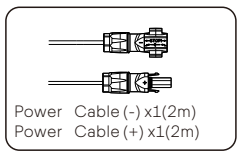
NOTE!
The Solax battery module is rated at IP55 and thus can be installed outdoors as well as indoors. However, if installed outdoors, do not allow the battery pack to be exposed to direct sunlight and moisture.

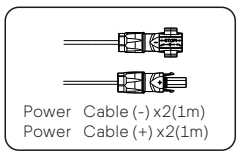
NOTE!
If the ambient temperature exceeds the operating range, the battery pack will stop operating to protect itself. The optimal temperature range for operation is 15°C to 30°C. Frequent exposure to harsh temperatures may deteriorate the performance and lifetime of the battery module.

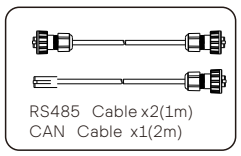
NOTE!
When installing the battery for the first time, the manufacturing date between battery modules should not exceed 3 months.

I Packing List (BMS Parallel Box-II)

Note: The Quick Installation Guide briefly describes required installation steps. If you have any questions, refer to the Installation Manual for more detailed information.


Power Cable (-) x1(2m)
Power Cable (+) x1(2m)


Power Cable (-) x2(1m)
Power Cable (+) x2(1m)


RS485 Cable x2(1m)
CAN Cable x1(2m)


Rotation Wrenchx1
Power cable disassembling toolx1


Expansion screwx2


Expansion tubex2

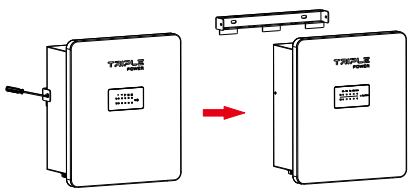

Ring Terminal x1
Grounding Nutx1


Installation Manual x1

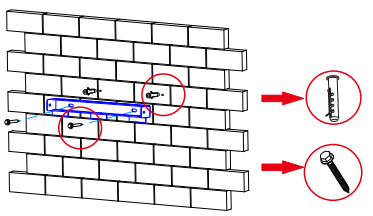
Quick Installation Guide x1

IV Battery Installation

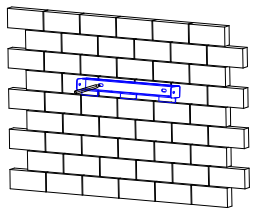
The bracket needs to be removed from the box.



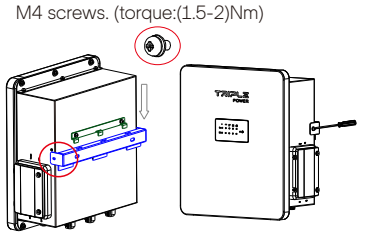
- Lock the joint between hanging board and wall bracket with M5 screws. (torque:(2.5-3.5)Nm)



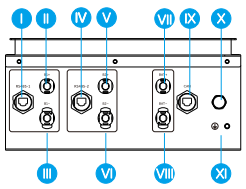
- Drill two holes with driller
- Depth: at least 3.15in

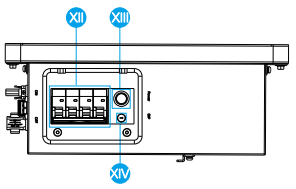


- Match the box with the bracket. M4 screws. (torque:(1.5-2)Nm)



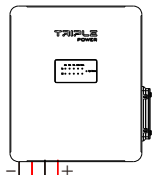
II Terminals of the BMS Parallel Box-II



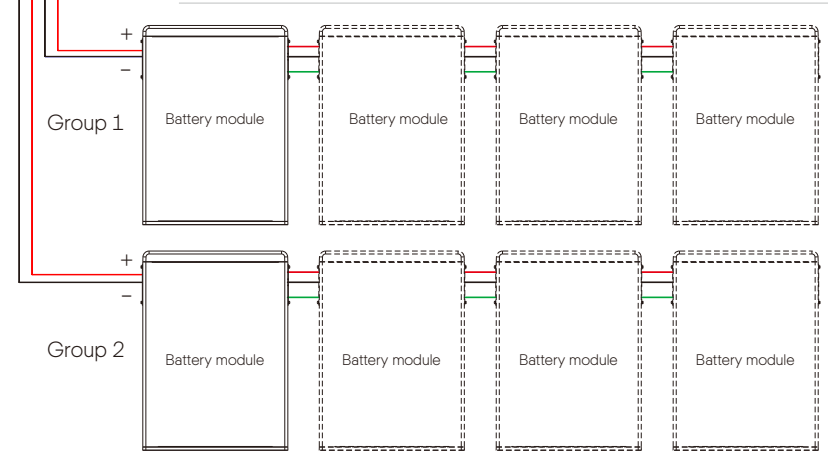


Object	Mark	Description
I	RS485-1	Battery module communication of group 1
II	B1+	Connector B1+ of Box to + of battery module of group 1
III	B1-	Connector B1- of Box to - of battery module of group 1
IV	RS485-2	Battery module communication of group 2
V	B2+	Connector B2+ of Box to + of battery module of group 2
VI	B2-	Connector B2- of Box to - of battery module of group 2
VII	BAT+	Connector BAT+ of Box to BAT+ of inverter
VIII	BAT-	Connector BAT- of Box to BAT- of inverter
IX	CAN	Connector CAN of Box to CAN of inverter
X	/	Air Valve
XI	⏚	GND
XII	ON/OFF	Circuit Breaker
XIII	POWER	Power Button
XIV	DIP	DIP Switch

V Overview of Installation

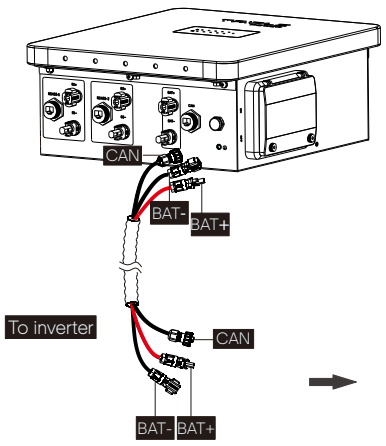


NOTE!
-If the battery is not used for more than 9 months, the battery must be charged to at least SOC 50 % each time.
-If the battery is replaced , the SOC between the batteries used should be as consistent as possibe, with a maxium difference of ±5 %.
-If you want to expand your battery system capacity, please make sure your existing system capacity's SOC is about 40%. The expansion battery is required to be manufactured within 6 months; If more than 6 months, recharge the battery module to about 40%.



VI Connecting Cables to Inverter

Box to Inverter:
BAT+ to BAT+;
BAT- to BAT-;
CAN to CAN

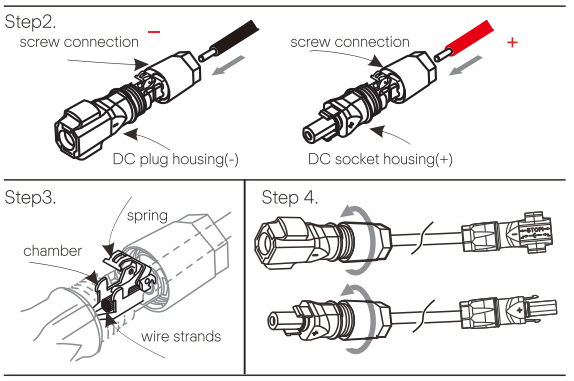


Step1. Strip the cable(A/B:2m) to 15mm.

Step2. Insert the stripped cable up to the stop (negative cable for DC plug(-) and positive cable for DC socket(+) are live). Hold the housing on the screw connection.

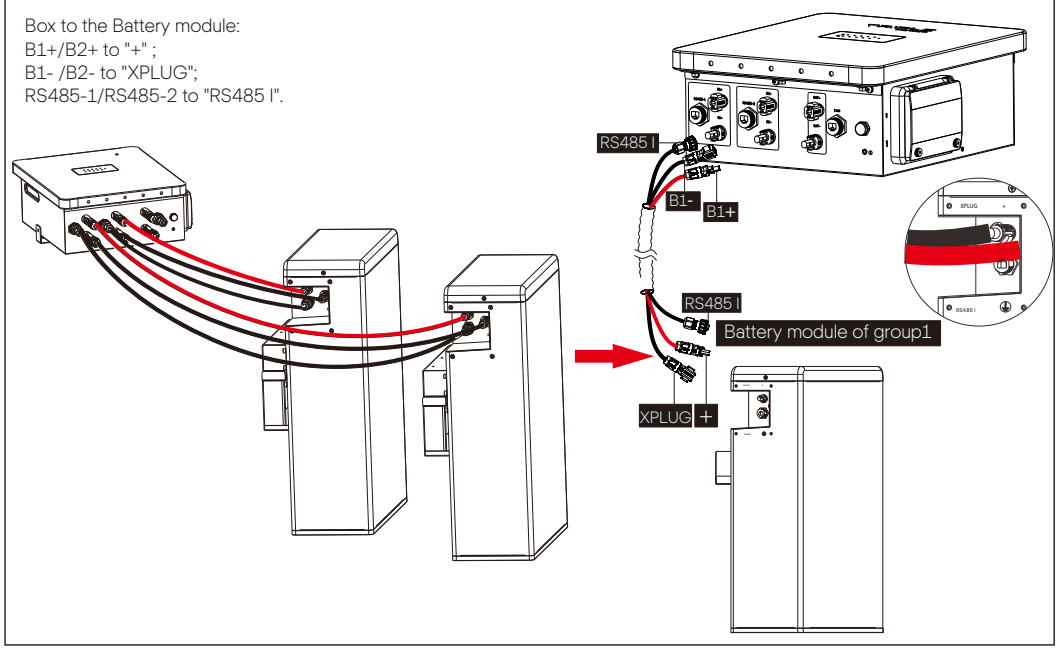
Step3. Press down the spring clamp until it clicks audibly into place (You should be able to see the fine wie strands in the chamber)

Step4. Tighten the screw connection(tightening torque:2.0±0.2Nm)



VII Connecting to Battery Modules

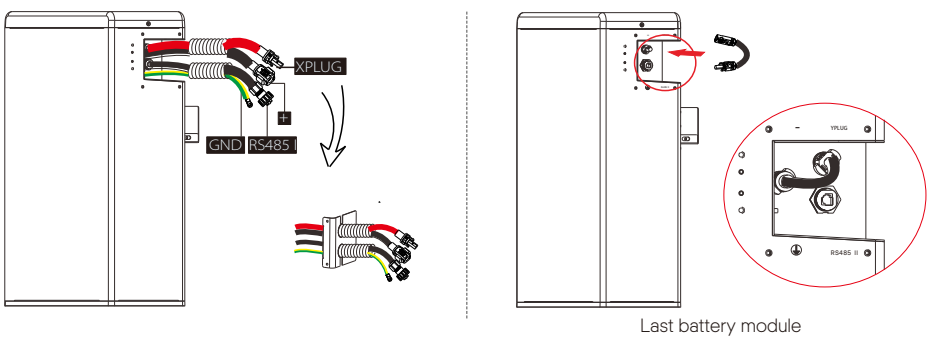
Box to the Battery module:
B1+/B2+ to "+" ;
B1- /B2- to "XPLUG";
RS485-1/RS485-2 to "RS485 I".



VIII Battery Module to Battery Module

Battery module to battery module(Get the cables through the conduit):

1. "YPLUG" on the right side of HV11550 to "XPLUG" on the left side of the next battery module.
2. "-" on the right side of HV11550 to "+" on the left side of the next battery module.
3. "RS485 I" on the right side of HV11550 to "RS485 II" on the left side of the next battery module.
4. The rest battery modules are connected in the same way.
5. Insert the series-connected cable at "-" and "YPLUG" on the right side of last battery module to make a complete circuit.



IX Communication Cable Connection

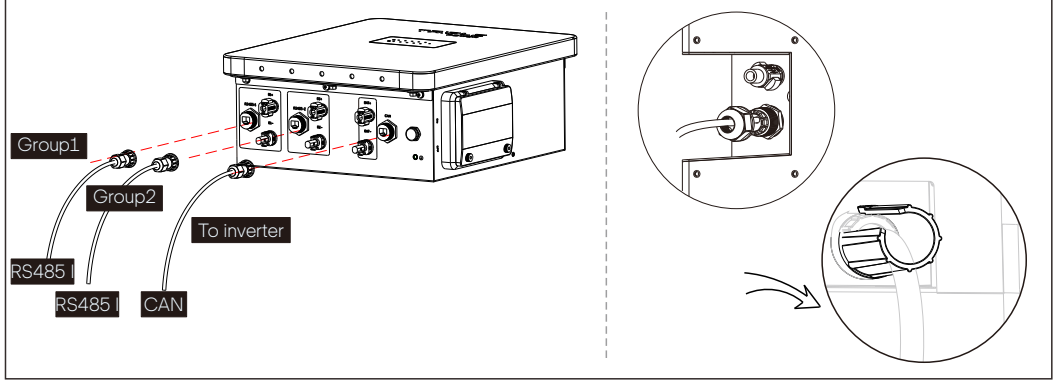
For Box:

Insert one end of the CAN communication cable without cable nut directly to the CAN port of the Inverter. Assemble the cable gland and tighten the cable cap.

For battery moudels:

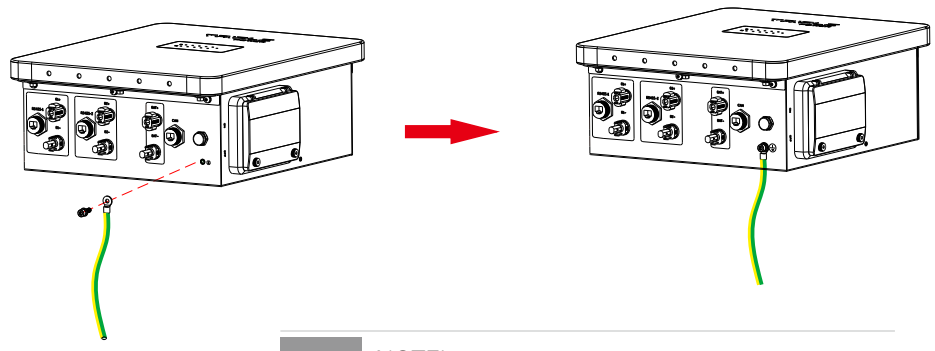
Connect the RS485 II communication system on the right side to RS485 I of the subsequent battery module on the left side.

Note:There is a protection cover for the RS485 connector. Unscrew the cover and plug one end of the RS485 communication cable to the RS485 connector. Tighten the plastic screw nut which is set on the cable with a rotation wrench.



X Ground Connection

The terminal point for GND connection is as shown below(torque:1.5Nm):

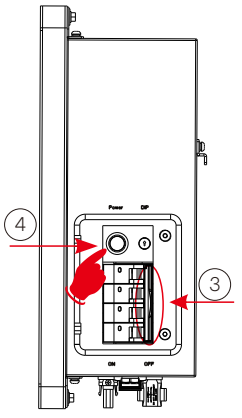


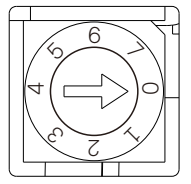
NOTE!
GND connection is mandatory!

XI Commissioning

If all the battery modules are installed, follow these steps to put it in operation

1) Configure the DIP to the corresponding number according to the number of battery module(s) that has (have) been installed
2) Remove the cover board of the box
3) Move the circuit breaker switch to the ON position
4) Press the POWER button to turn on the box
5) Re-install the cover board to the box
6) Turn on the inverter AC switch





Configuration activated by inverter::
0- Matching a single battery group(group 1 or group2)
1- Matching both battery groups(group 1 and group2).

NOTE!
If DIP switch is 1, the number of batteries in each group must be the same.