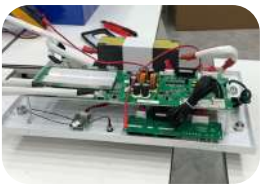
BASEN GREEN

48230KITS/48300KITS
Assembly Instructions

WARNING:
If any parts are missing, damaged or worn, stop using this KITS. Repair the KITS with manufacturer supplied parts.

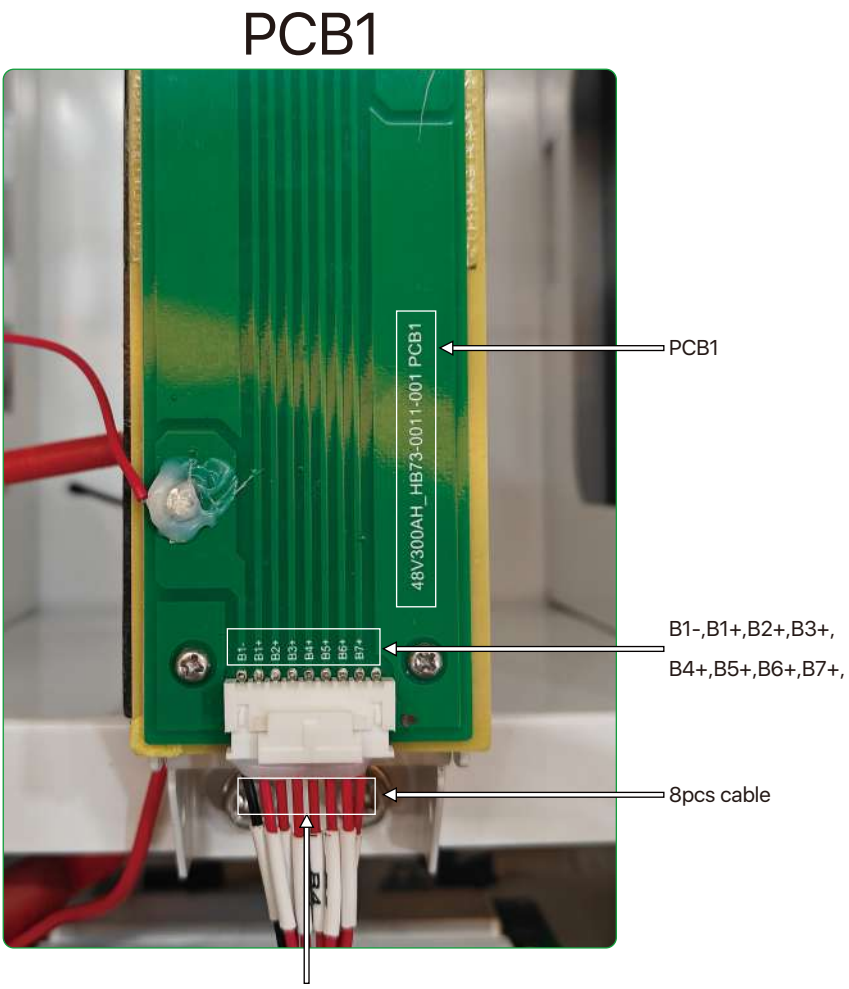
IMPORTANT:
Read these instructions carefully before beginning assembly. Failure to follow these instructions may result in serious injury.
Carefully unpack all parts and identify them with the parts list before attempting to assemble the KITS. Remove all cardboard and plastic covering from DIY KITS parts. Please examine all packing material before discarding it.

ALL DIY kIT accessories are
included in the DIY box



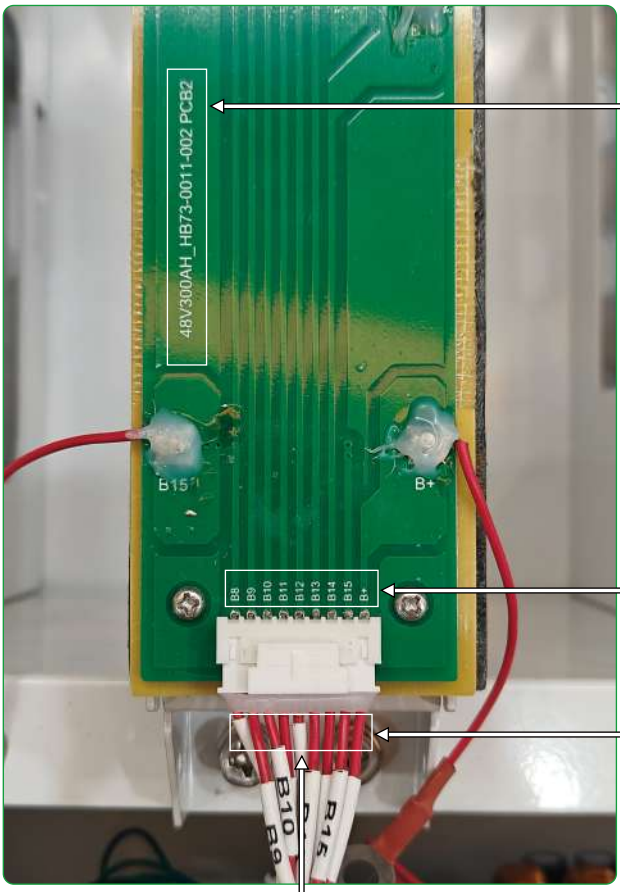
Wire pre-installation

When receiving the 48V kits accessories, the customers need to check whether the collection line of PCB bars is wrong inserted or not, it means that PCB1 and PCB2 have assembly errors, PCB1 and PCB2 board are marked, as shown in the following picture:



PCB1 board is marked with wires, they are B1-, B1 +, B2 +, B3 +, B4 +, B5 +, B6 +, B7 +, and there are 8 lines on the collector terminal; "B1-" is black, you must confirm the wiring before inserting, or else it will damage the BMS, and we won't provide after-sales service.

PCB2



PCB2

B8, B9, B10, B11, B12, B13, B14, B15, B+

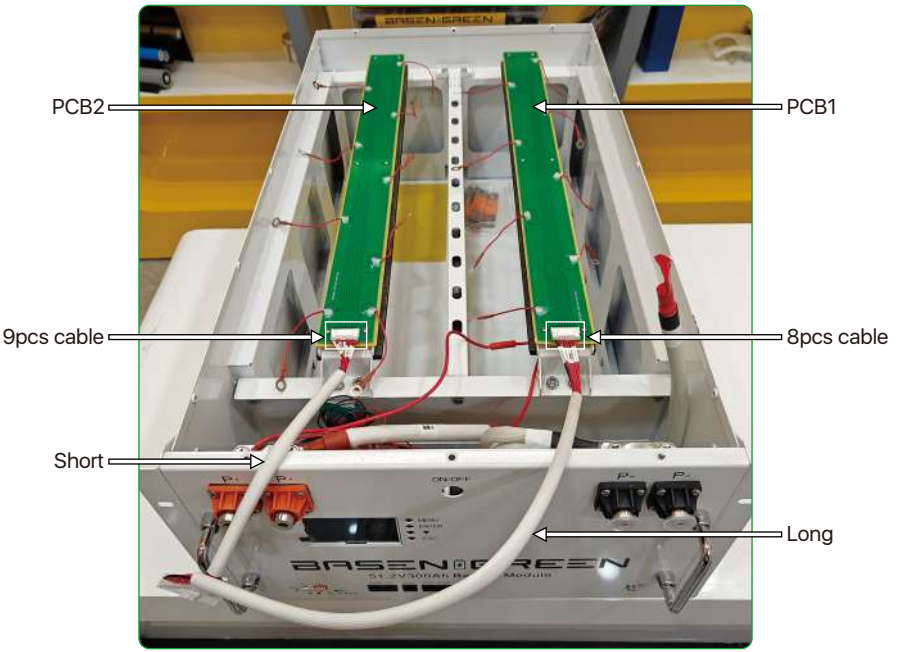
9pcs cable

On PCB2 board, B8, B9, B10, B11, B12, B13, B14, B15 and B +. There are 9 lines on the acquisition line terminals. PCB2 has no black wires, you must confirm the wiring before inserting, otherwise it will damage the BMS and we will not provide after-sales service.

Note:

Please make sure that the goods you receive are as follows. If you receive the goods and they are inconsistent with the picture, you should report to our customer service in time. Do not assemble them without permission.

PCB2 with 9pcs cable-short cable-left
PCB1 with 8pcs cable-long cable-right

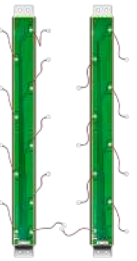


Packing list

Please check the product carefully after receiving it, if any accessories are missed, please contact BASEN.

A (Pre-installed)
Shell*1

B (Pre-installed)
Cover plate*1



C (Pre-installed)
PCB bars*2

D (Pre-installed)
Front plate*1

E (Pre-installed)
Handle*2

F (Pre-installed)
LCD Display*1

G (Pre-installed)
BASEN GREEN
16S 200A BMS*1

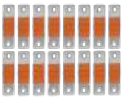
H (Pre-installed)
Temperature
NTC leads*1

I (Pre-installed)
16S voltage
acquisition cable*1

J (Pre-installed)
16S 2A active
equalizer*1

K
Fiberglass
Insulation plate*24

L
Screws*32

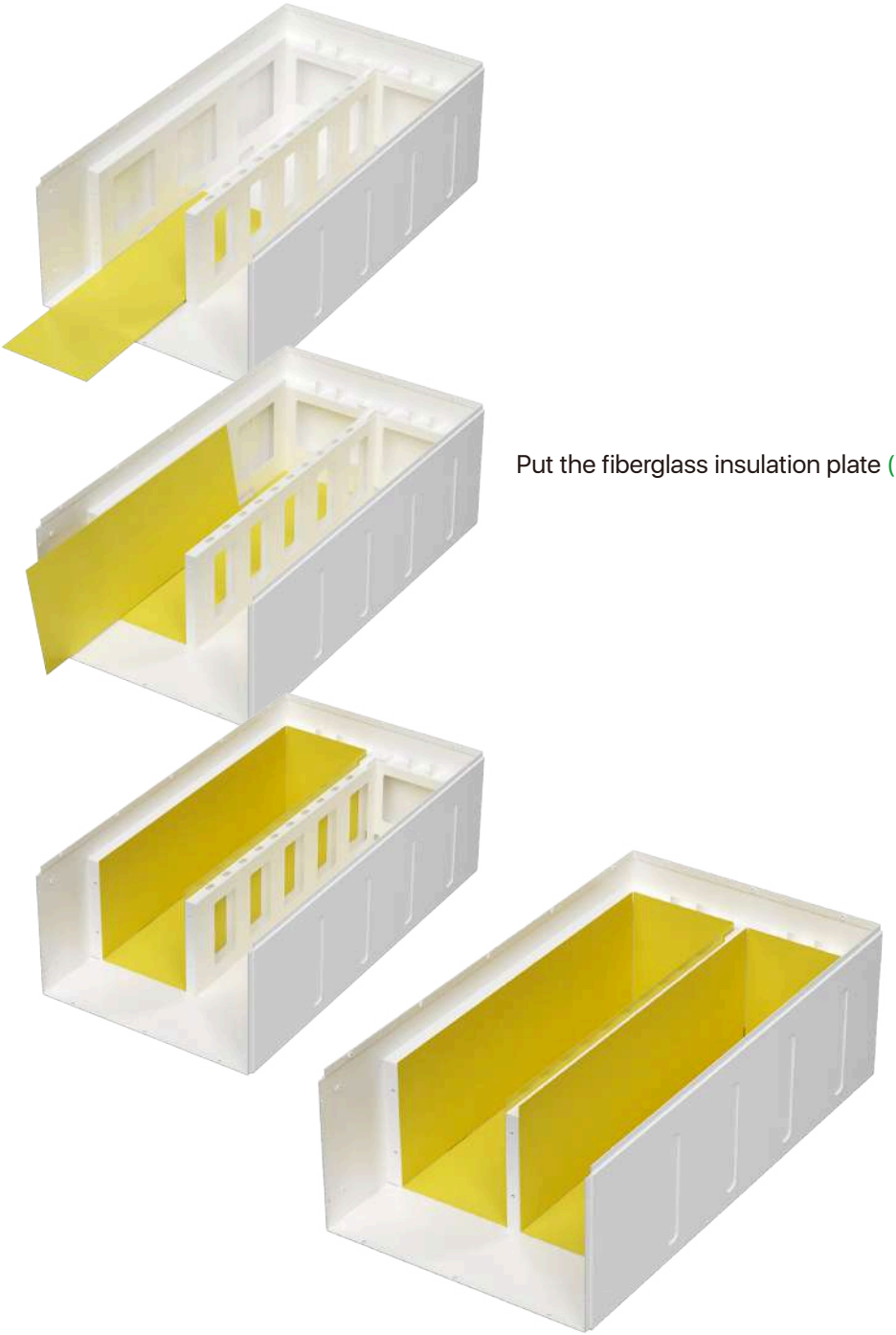


M
Flexible busbar*16

N
Inverter communication cable*1

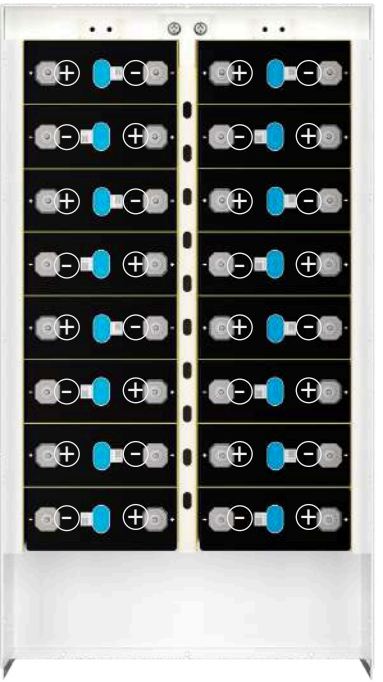
O
USB-RS485 communication cable*1

Romove the BMS front plate(D),
the cover plate(B),
and the PCB bars (C)

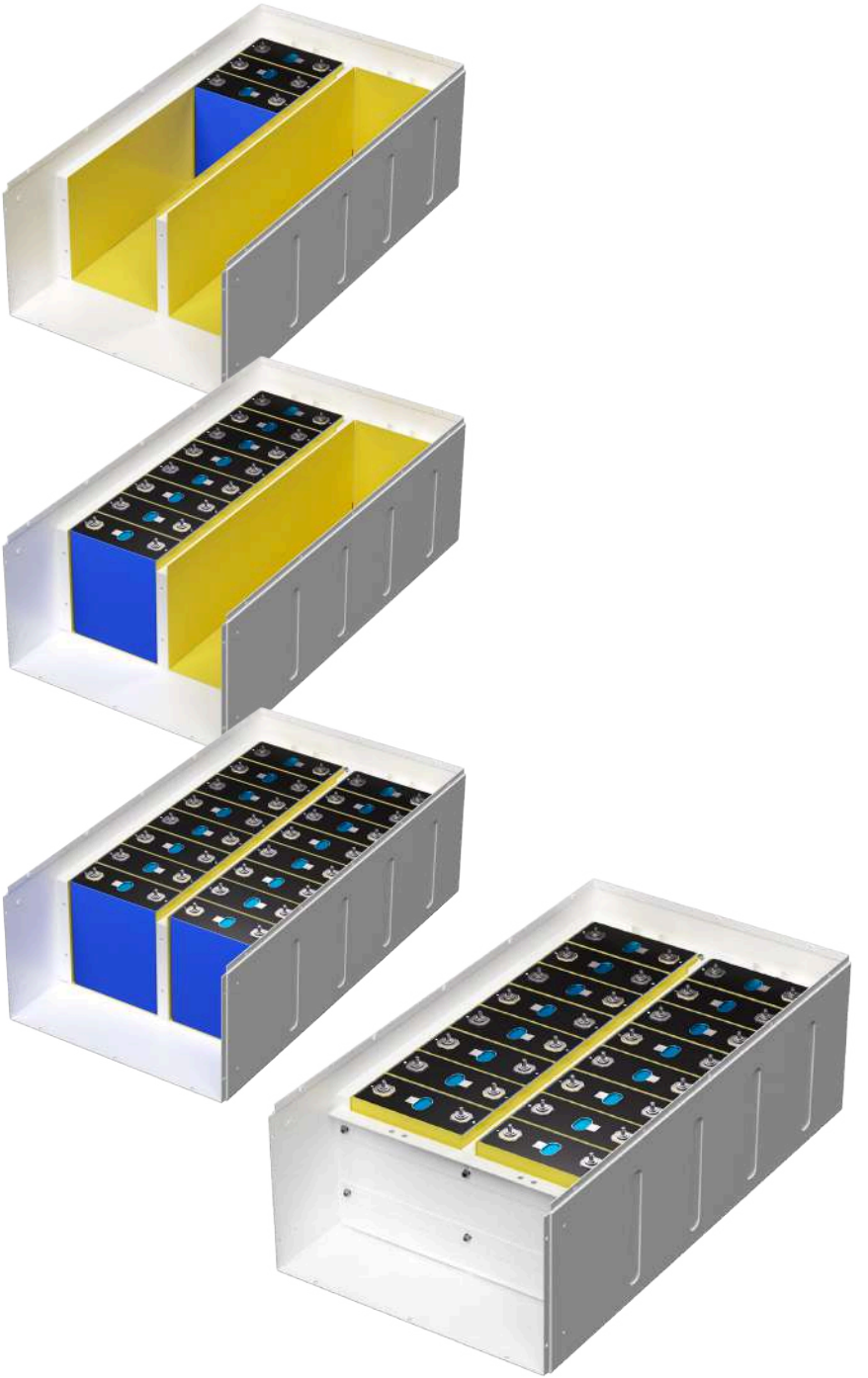


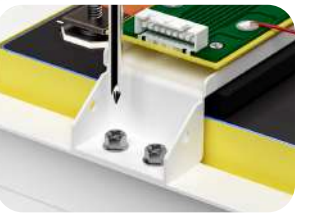
Put the fiberglass insulation plate (K)

Cells Voltage difference ≤ 20mV

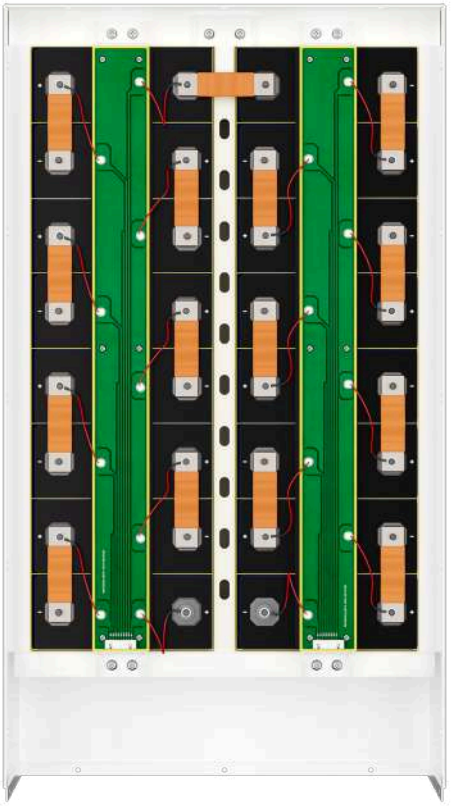


Place the battery cells in the chassis, separated by fiberglass insulation plate (K)

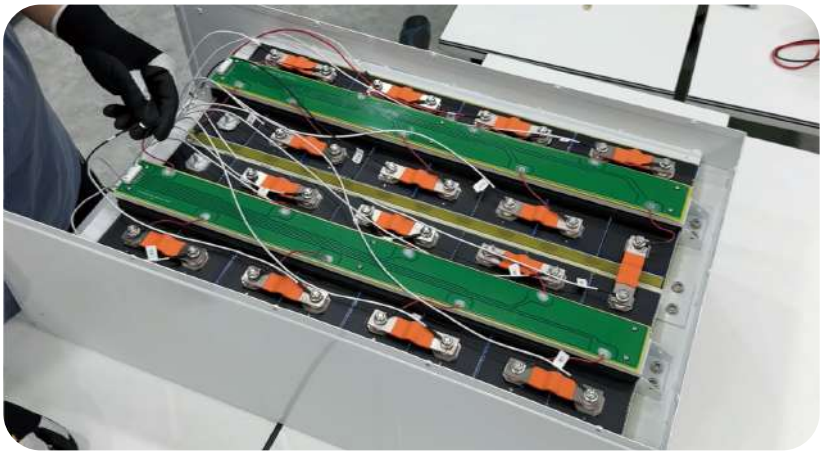




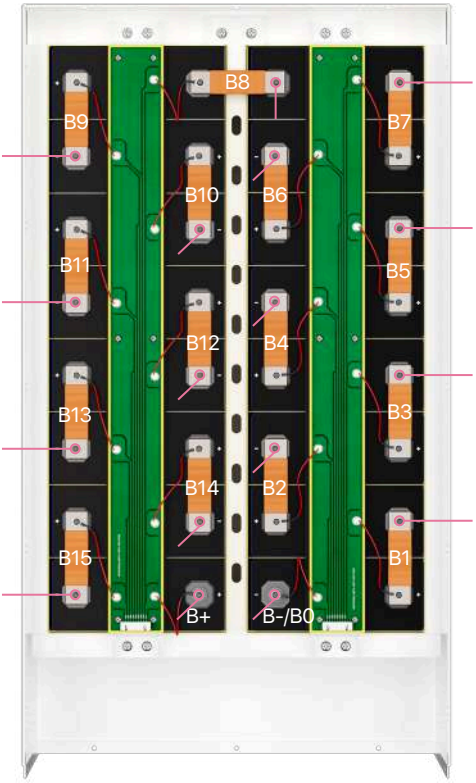
Link the PCB bars(C) and flexible busbar(M), then screw up(Torque: 5-6 Nm)



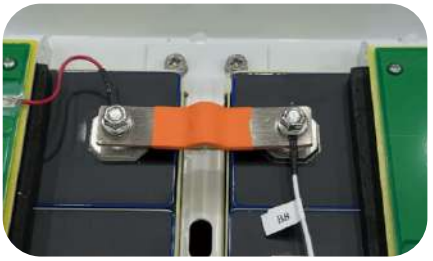
Installation of Equalizer (J)



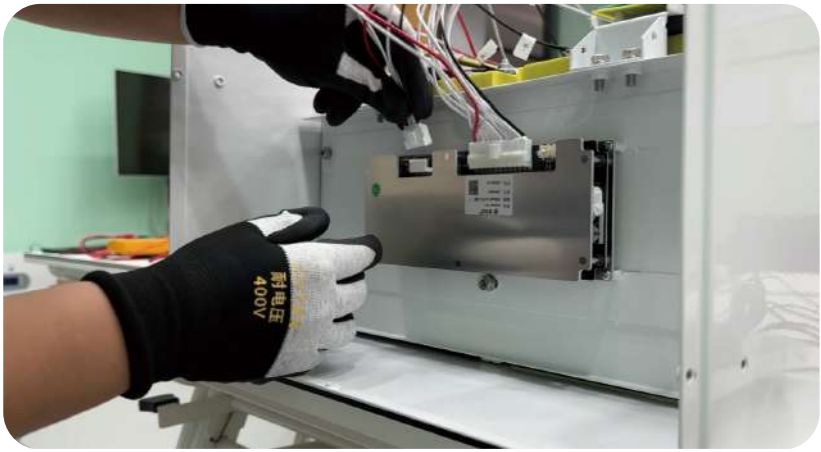
Linking Equalizer Cables (J)



Each wire has a corresponding label

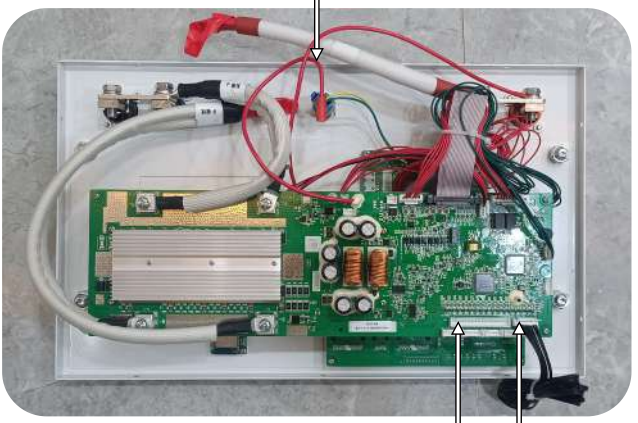


Link the other end of the flexible busbar according to the corresponding value.


400V

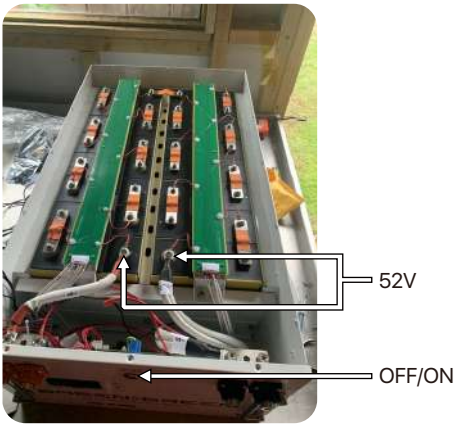
528
Measure the pack's voltage, it should be ≥52V

Put the BMS front plate(D) on, plug the voltage acquisition lead P+ lead to the main positive, and B- lead to the main negative, then put the B+ lead on, and stick the temperature NTC leads(H) on the cells by heat proof tape.



Check every connection, the voltage between the main positive and the negative is >52V, then turn the button on, the LCD and the indicator work out, then the assembly operation is completed.

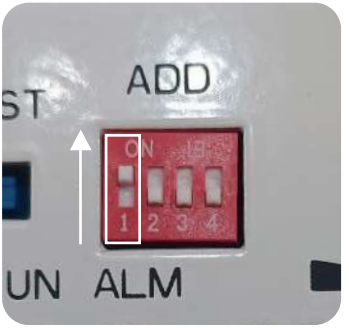
Unbox and install video: https://www.youtube.com/watch?v=KxcEyd8IVSY&t=7s

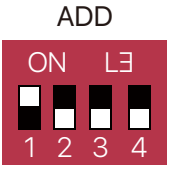


Operation of Upper System

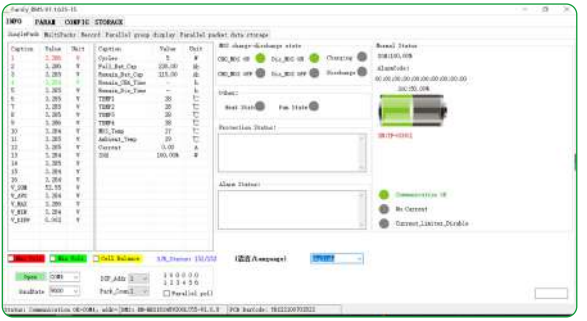
Firstly, connect the USB to RS485 Cable from Battery to the PC/Laptop, dip switch 1 on the front plate, download the PC software and open it.

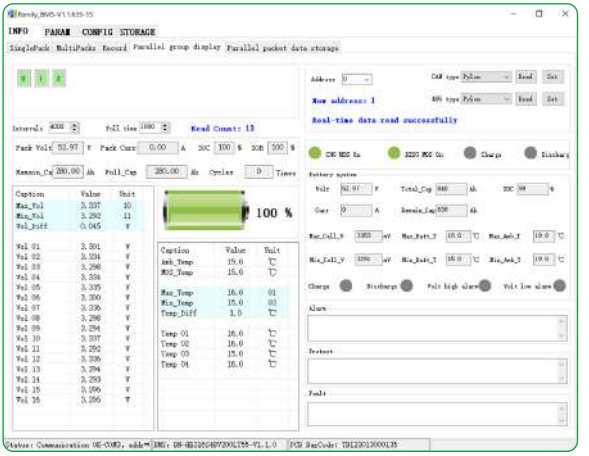
Secondly, modify the language, and check the status of the battery pack





P.S: Please check the data on "single pack" page when only 1 pack is connected, the page of "Parallel group display" might show the nonsense characters.





Operation of Bluetooth

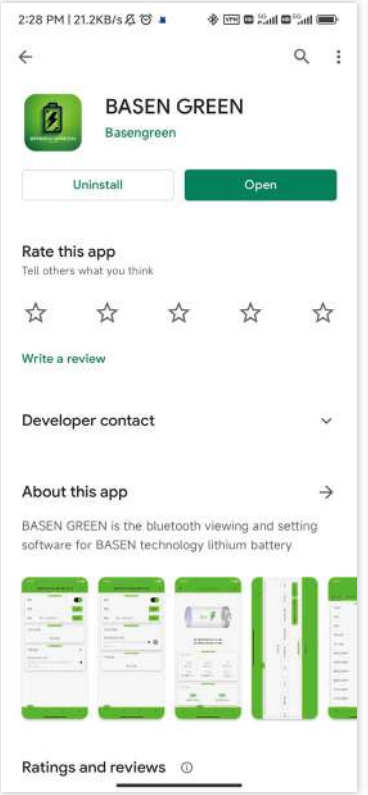
DIY KIT is equipped with a Bluetooth function, supports APP monitoring battery statuses. All information available in the battery, such as the state of charge, voltage, operating current, temperature, and other operating information are transmitted in real-time via the Bluetooth transmitter. The parameters can be made visible with the BASENGREEN App.

Download: Android: "BASENGREEN" in Play Store

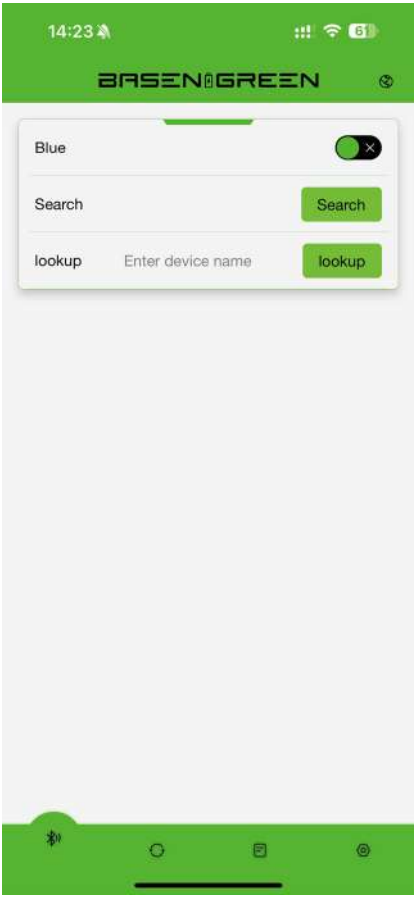
iOS: "BASENGREEN" in Apple Store

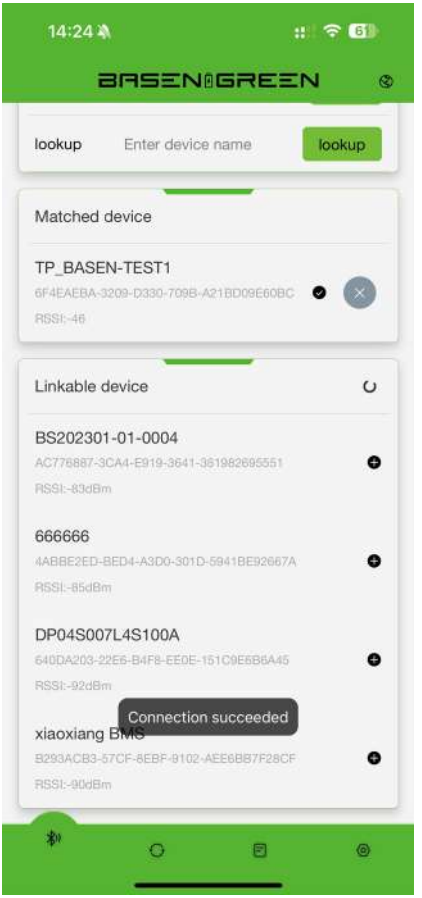
Bluetooth

1. For Android users, please visit the Google Play Store and search for 'BASENGREEN'. For iOS users, go to the Apple Store and look up 'BASENGREEN'.



2. Turn on Bluetooth and search for the corresponding product's Bluetooth code



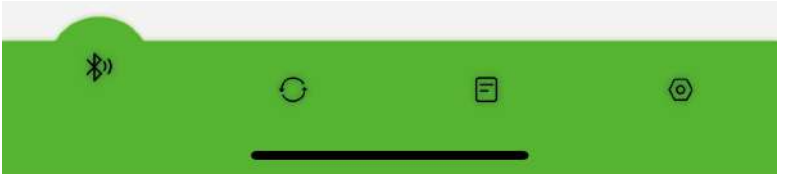


NOTE:

a. If you selected a battery to connect to and the app doesn't confirm the connection, it might be someone else is already connected to the battery. Only one device connects to the battery at the same time.

b .The Bluetooth app supports status monitoring only. It does not support any modified operation except communication protocol switching

3. Menu



Bluetooth list: Check the Device list and connect it.

Homepage: Check the status of battery-SOC, Volt, Current, Temperature, etc.

Historical Data: Not available

Setting: Base Message: Check the pack voltage, current, cycle time, etc.

Cell Voltage: Check the cells voltage.

Language: English/Chinese switching.

Fault Data: Not available

System Parameter: Not available

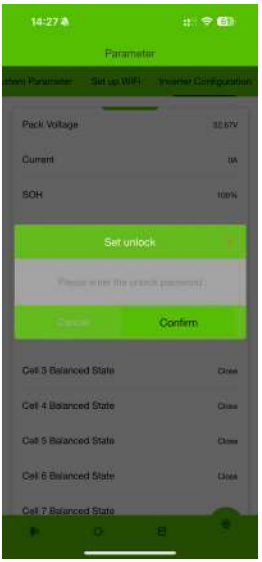
Set up WiFi: Setup WiFi function(Not available)

Inverter configuration: Communication protocol switching(Chapter 9.2)

Operation of Communication Protocol Switch(Via Bluetooth App)

a. Connect to the Bluetooth app first

b. Swipe left to find 'Inverter Configuration'. Set unlock code is 888888

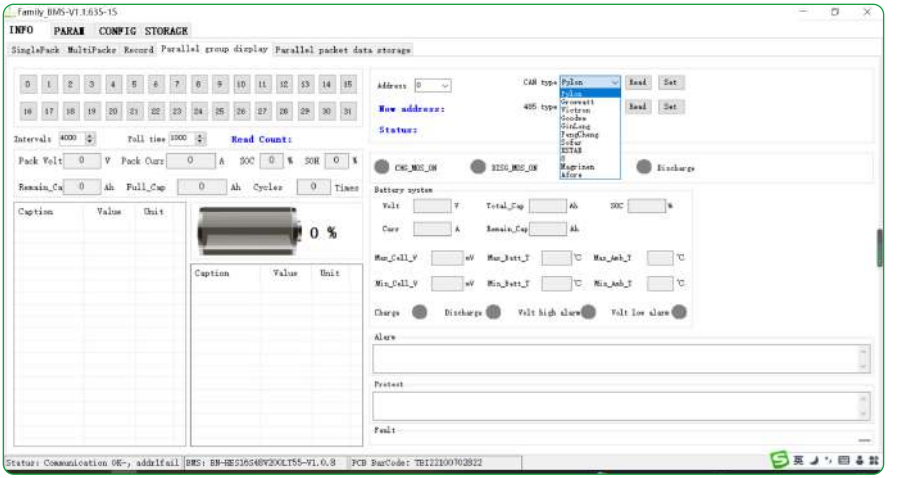


c. Choose the communication protocol and set, the battery pack will be restart after few second with “bee” sound. Then set up is successful.

Switching communication protocols via PC

Open the PC software and follow the path:

INFO—Parallel Group Display—CAN Type/RS485 Type—Read—Choose the protocol—Set



Communication Protocol Switching via Screen

1. Introduction

There are 4 buttons on the side of screen

MENU : Enter the "MENU" page

ENTER : Confirm the change/enter the next page

▼ : Select items/turn pages

ESC : Back to the last page

2. Switch the communication protocol

a. Turns on the battery, the screen will lights up and shows the data.

b. Click "MENU" button, then click ▼, enter the "CommType Set" page.

c. There are CAN/RS485 options, click the correct option based on the inverter model. (Default communication protocol: Pylon)

d. Choose the protocol and click the "ENTER"button.

e. All of the indicators will light up after 3-5 seconds, and then it has a "bee" sound. The screen will show the latest communication protocol, which means the protocol has been updated successfully.

Communication Compatible List

BASEN GREEN 深圳市贝森科技有限公司 Shenzhen Basen Technology Co.,Ltd

BASEN BMS Inverter Communication Protocol Matching List

Inverter Brand		Communication method	Protocol Name	Protocol Remarks	Communication Potter rate	Interface Definition
维克托-Victron	victron energy	CAN	Victron-CAN-V1.00- 211135	Active Upload	500K	7H、8L
古瑞瓦特-SPF Growatt-SPF	Growatt	485	Growatt BMS-RS485-protocol-1xSxP_ESSL_V2.01 Growatt BMS-RS485-protocal-V2.0	MODBUS Standard protocols	9600	1B、2A
古瑞瓦特-SPF Growatt-SPF	Growatt	CAN	Growatt BMS CAN-Bus-protocol-low-voltage-V1.05	Active Upload	500K	4H、5L
古瑞瓦特-SPH Growatt- SPF	Growatt	CAN	Growatt BMS communication protocol of growatt low voltage-V1.01	Active Upload	500K	4H、5L
德业 Deye	Deye 德业	CAN	Deye LV-CAN communication protocol	Active Upload	500K	4H、5L
德业 Deye	Deye 德业	485	485 Modbus Protocol(4)-deye	MODBUS protocols	9600	1B、2A
尚科-Solar	SACOLAR	CAN	Growatt BMS CAN-Bus-protocol-low-voltage-V1.05	Active Upload	500K	4H、5L
固德威-Goodwe	GOODWE	CAN	Goodwe-CAN-V1.7-220228-SolarinverterFamily-EN	Active Upload	500K	4H、5L
日月元-Voltronic Power	Voltronic Power	485	Voltronic Power-485-V1.03-200325	MODBUS protocols	9600	3B、5A
首航-SOFAR	SOFAR	CAN	SOFAR-CAN-V1.00-211117-Rev6	Active Upload	500K	1H、2L
锦浪-Solis	solis	CAN	Solis-CAN-V1.0-191228-lowVoltage	Active Upload	500K	4H、5L
鹏城-Luxpower	LUXPOWER TEK	CAN	Luxpowertek Battery CAN Protocol -2021	Active Upload	500K	4H、3L
派能-Pylontech	PYLONTECH	485	Pylon-485-V3.5-161216-low voltage protocol	1363	115200	1B、2A
派能-Pylontech	PYLONTECH	485	Pylon-485-V3.5-161216-low voltage protocol	1363	9600	1B、2A
派能-Pylontech	PYLONTECH	CAN	Pylon-CAN-V1.2- 180408 -lowVoltage	Active Upload	500K	4H、5L
顺日-Srne	SRNE	485	shuori BMS Modbus Protocol for RS485 V1.3(2020-11-24)	MODBUS	9600	7A、8B
美世乐 Must	MUST 美世乐	CAN	PV1800F-CAN communication Protocol1.04.04	Active Upload	100K	6H、5L
艾思玛 SMA	SMA	CAN	SMA-CAN-V1.0.0-210630-FSS-ConnectingBat-TI-en-20W	Active Upload	500K	4H、5L
阳光电源 SUNGROW	SUNGROW	CAN	Pylon-CAN-V1.2- 180408 -lowVoltage	Active Upload	500K	4H、5L
爱士惟 AiSWEI	AiSWEI	CAN	Pylon-CAN-V1.2- 180408 -lowVoltage	Active Upload	500K	4H、5L
英威腾 INVT	invt	CAN	Pylon-CAN-V1.2- 180408 -lowVoltage	Active Upload	500K	4H、5L
科士达 KSTAR	KSTAR	CAN	Kstar CAN_Protocol-V1.11	Active Upload	500K	4H、5L
艾伏 Afore	Afore	CAN	Afore Communication Protocol CAN Bus Version V1.02_20210104	Active Upload	500K	4H、5L
索瑞德-SOROTEC	SOROTEC	CAN	CAN Protocol 1.0(SOROTEC Protocol)	MODBUS Standard protocols	500K	4H、5L
索瑞德 SOROTEC	SOROTEC	485	Protocal between Sorotec Inverter and Lithium Battery (RS485)	Active Upload	500K	1B、2A
SOL-ARK	Sol-Ark	CAN	Sol-Ark CAN Bus Protocol V1.2.pdf4-25-22		500K	4H、5L
边格瑞能 MEGAREVO	MEGAREVO	CAN	Shenzhen MEGAREVO Hybrid Inverter-5K BMS Protocol V1.01	Active Upload	500K	4H、5L
MPP Solar	MPP Solar	485	BMS 485 communication protocol 20200325(2)	MODBUS	9600	1B、2A
拓宝-TBB	TBB POWER	CAN	CAN BUS Protocol of TBB Lithium Battery BMS Platform V 1.1	Active Upload	500K	4H、5L
盛能杰-Senergy	Senergy 盛能杰	CAN	SenergyINV&BMS_CAN_Protocols	Active Upload		4H、5L

Need additional information?

Just Contact BASEN!

BASEN GREEN

BASENGREEN
YOUR RELIABLE POWER

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