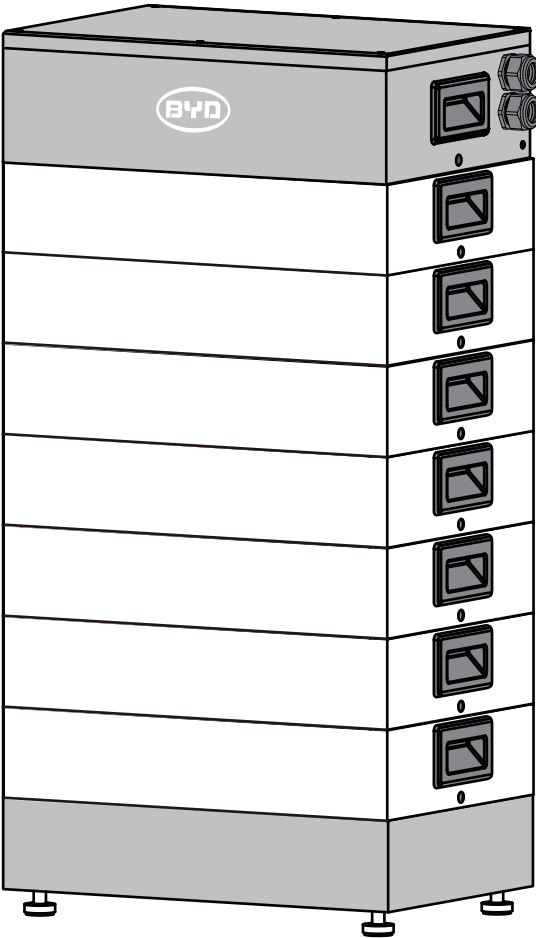


BYD Battery-Box HV

QUICK REFERENCE GUIDE

Valid for Battery-Box H 5.1/6.4/7.7/9.0/10.2/11.5 (AU)



Target Group

Skilled personnel recognized

This manual and the tasks and procedures described herein are intended for use by skilled workers only.

A skilled worker is defined as a trained and qualified electrician or installer who has all of the following skills and experience:

- Knowledge of the functional principles and operation of on-grid systems.
- Knowledge of the dangers and risks associated with installing and using electrical devices and acceptable mitigation methods.
- Knowledge of the installation of electrical devices.

• Knowledge of and adherence to this manual and all safety precautions and best practices.

• Please note that this is the quick reference guide only. It is a shortened assistance for the installation of the Battery HV and does not replace the original installation manual. The original installation manual must be read and understood completely before installation. Please download and view the installation manual on this website: <http://alpspower.com.au>. (Downloads)

• In order to ensure the normal operation of Battery-Box, please be sure to update the firmware to the latest version and finish the configuration on Battery-Box webpage in accordance with this document.

• The system switch must be off before installing.

• Please make sure the system switch is off in case of the system not working, and it would be better to repair it again within one week, avoiding overdischarge or other problems happen.

• Please do not stack up batteries without protective package when storing or handling batteries, unless in the case of installation.

Installation environment requirements

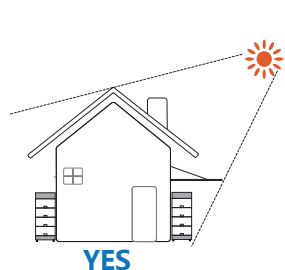
Max.
+50°C



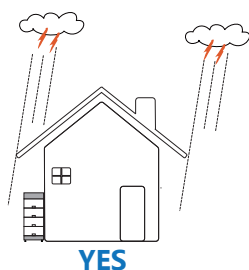
Min.
-10°C



RH.
+5%~+95%



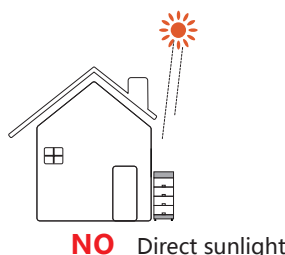
YES



YES



YES



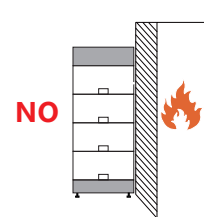
NO Direct sunlight



NO Direct rain fall

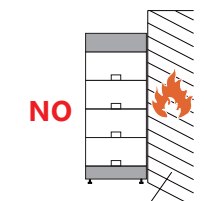


NO Snow accumulation



NO

Flammable material or gas near the installation



NO

Flammable wall

Tools

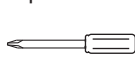
Wire clamp



Precision screwdriver



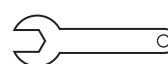
Phillips screwdriver



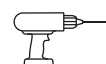
Inclinometer



Wrench



churn drill



Packing list

Packing of BCU+BASE

① M6 2pcs ② M4 3pcs ③ Expansion bolt M6 3pcs ④ OT terminal for Ground×1pcs ⑤ Black sealing plug×3pcs ⑥ White sealing plug×2pcs



Packing of B-Plus H 1.28A

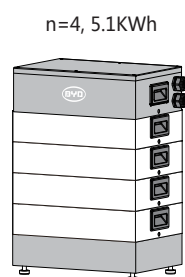
⑦ M6×2pcs ⑧ White sealing plug×2pcs



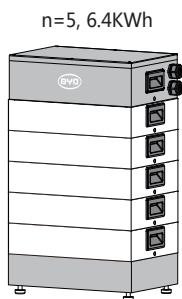
Overall structure

* If connected to the SMA inverter, n = 5-8 Modules
Unless SMA & BYD updates the information.

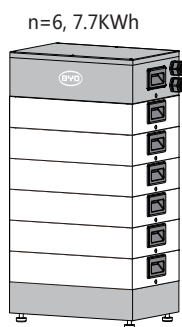
* Whether the inverter supports 4 battery matching, please consult the inverter manufacturer.



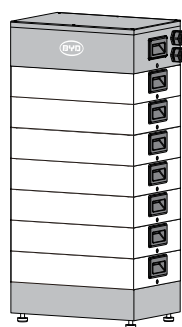
n=4, 5.1KWh



n=5, 6.4KWh



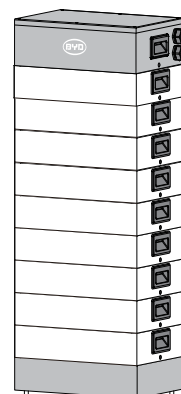
n=6, 7.7KWh



n=7, 9.0KWh



n=8, 10.2KWh



n=9, 11.5KWh

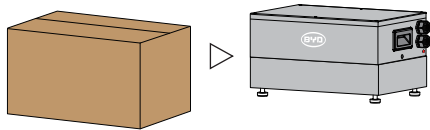
BCU

B-Plus H 1.28A

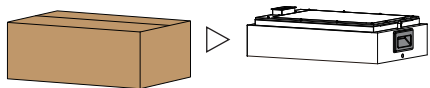
Base

1. Unpack

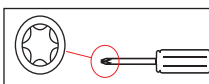
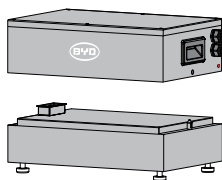
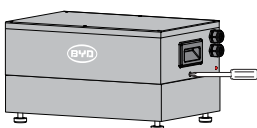
BCU + Base



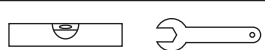
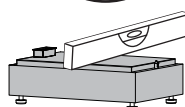
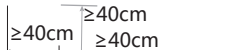
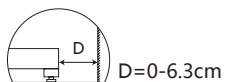
B-Plus H 1.28A



2. Separate base and BCU

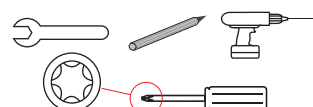
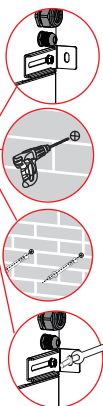
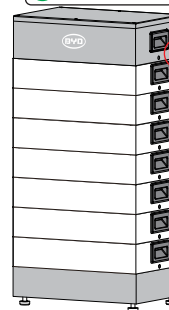
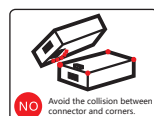


3. Balance

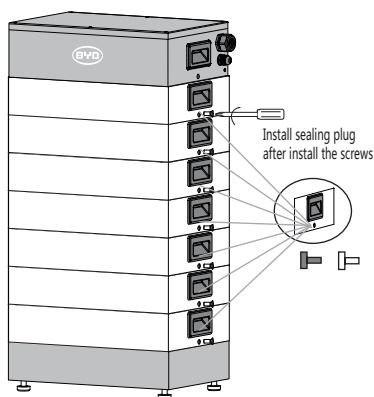


4. Install Wall-mount

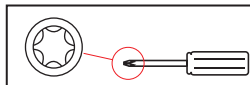
Before installing BCU, make sure the system switch is switch off.



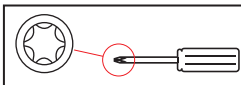
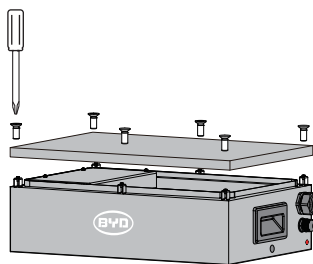
5. Locking



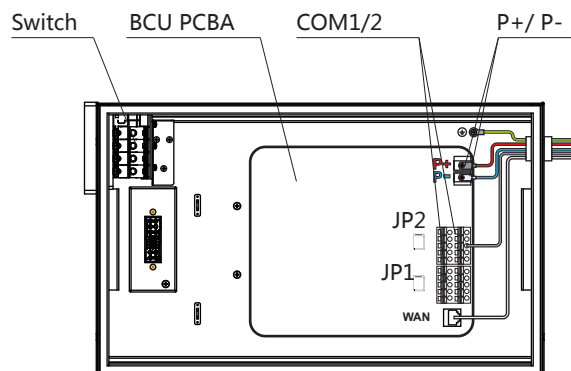
Install sealing plug after install the screws



6. Open the BCU cover

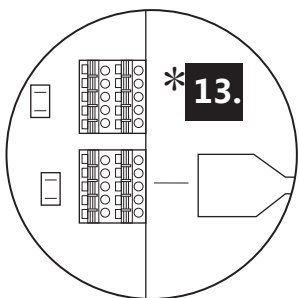
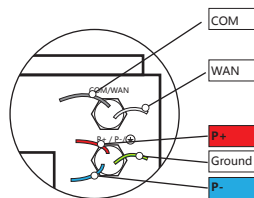
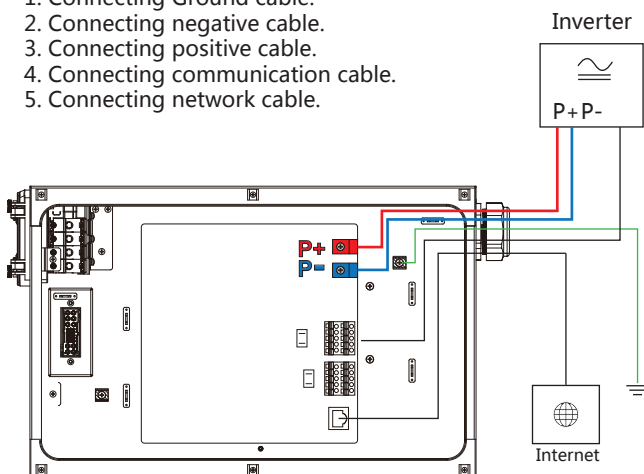


7. Over view of BCU



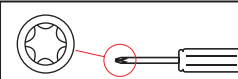
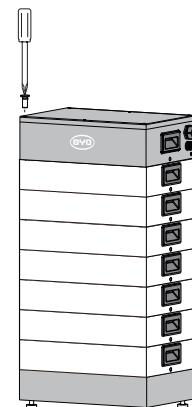
8. Connect the cables

1. Connecting Ground cable.
2. Connecting negative cable.
3. Connecting positive cable.
4. Connecting communication cable.
5. Connecting network cable.

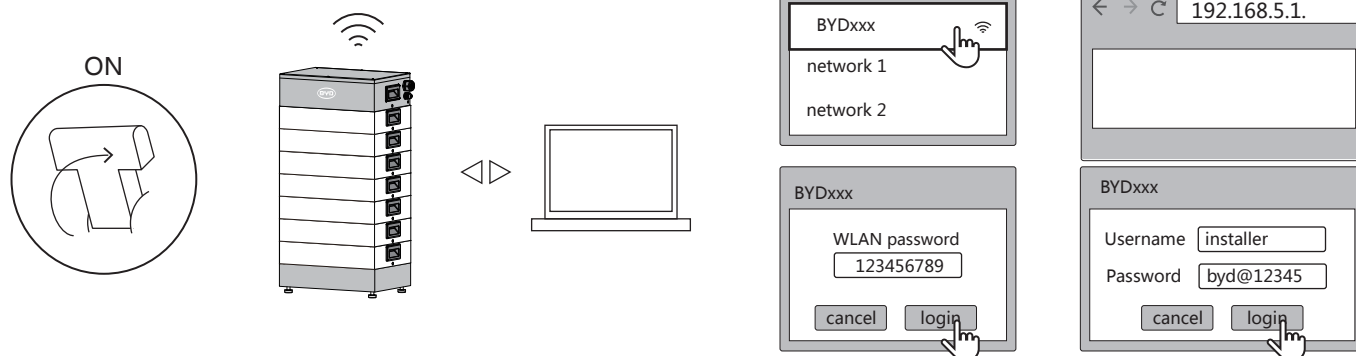


9. Install the cover

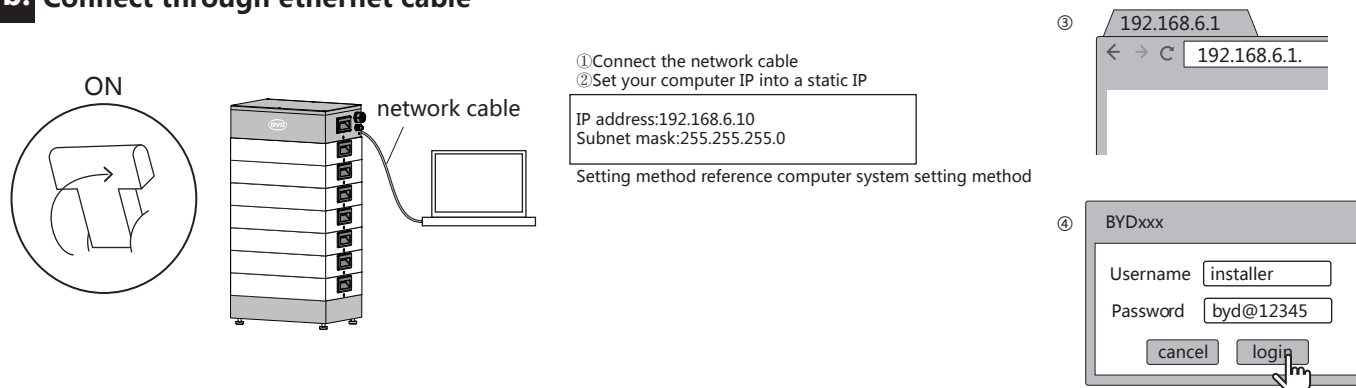
1. Lock diagonal screws.
2. Lock other screws.



10a. Connect through WIFI



10b. Connect through ethernet cable



11. Setup system information

Battery-Box HV

Privacy Policy

Installation

Home

Device Information

Installation Config

Statistics Information

Current Alarm

History Alarm

Run Date

Set Password

Update

1 STEP 1 2 STEP 2 3 FINISH & REBOOT

Time and Date * Hour : Min : Day : Month : Year :

Next

1 STEP 1 2 STEP 2 3 FINISH & REBOOT

Server IP Address * bboxserver.byd.com.cn

Series Battery Conts * 4/5/6/7/8/9

Inverter * SMA

Country *

Asterisk(*) Indicates required fields

These parameters is important.
Please make sure the correct configuration for these parameters,
otherwise the system might not work normally.

Last Next

1 STEP 1 2 STEP 2 3 FINISH & REBOOT

Reboot System...
Please wait about 50 seconds.

12. Update the firmware

☆ You must update the latest firmware of BCU after completing the Battery-Box H 5.1-11.4, to prevent battery overdischarge or damage.

Battery-Box HV

Privacy Policy

Installation

Home

Device Information

Installation Config

Statistics Information

Current Alarm

History Alarm

Run Date

Set Password

Update

Download the firmware : <http://alpspower.com.au/download/>

Update

Please input the file : Search... Upload

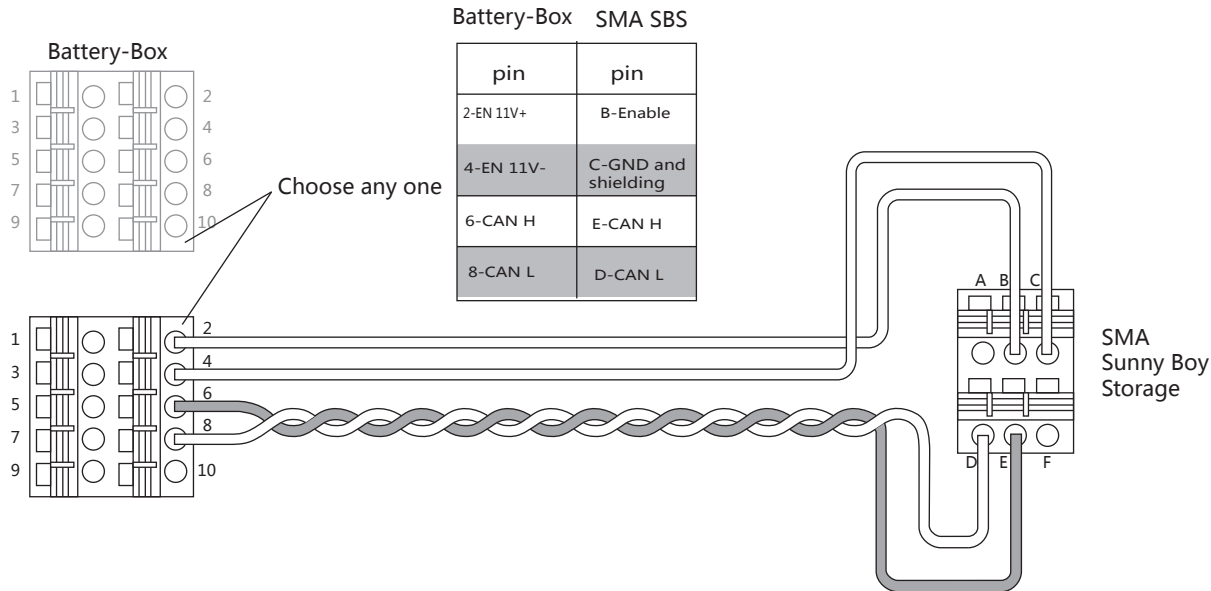
If there is any new version on the server, clicking UpdateCheck will update the syesem.

Please input file: Search

Upload

13a. SMA Sunny Boy storage 2.5 / 3.7 / 5.0 / 6.0

Use a twisted-pair wire for CAN_H and CAN_L (PIN 6 and 8). This is important for the stability of the CAN communication.



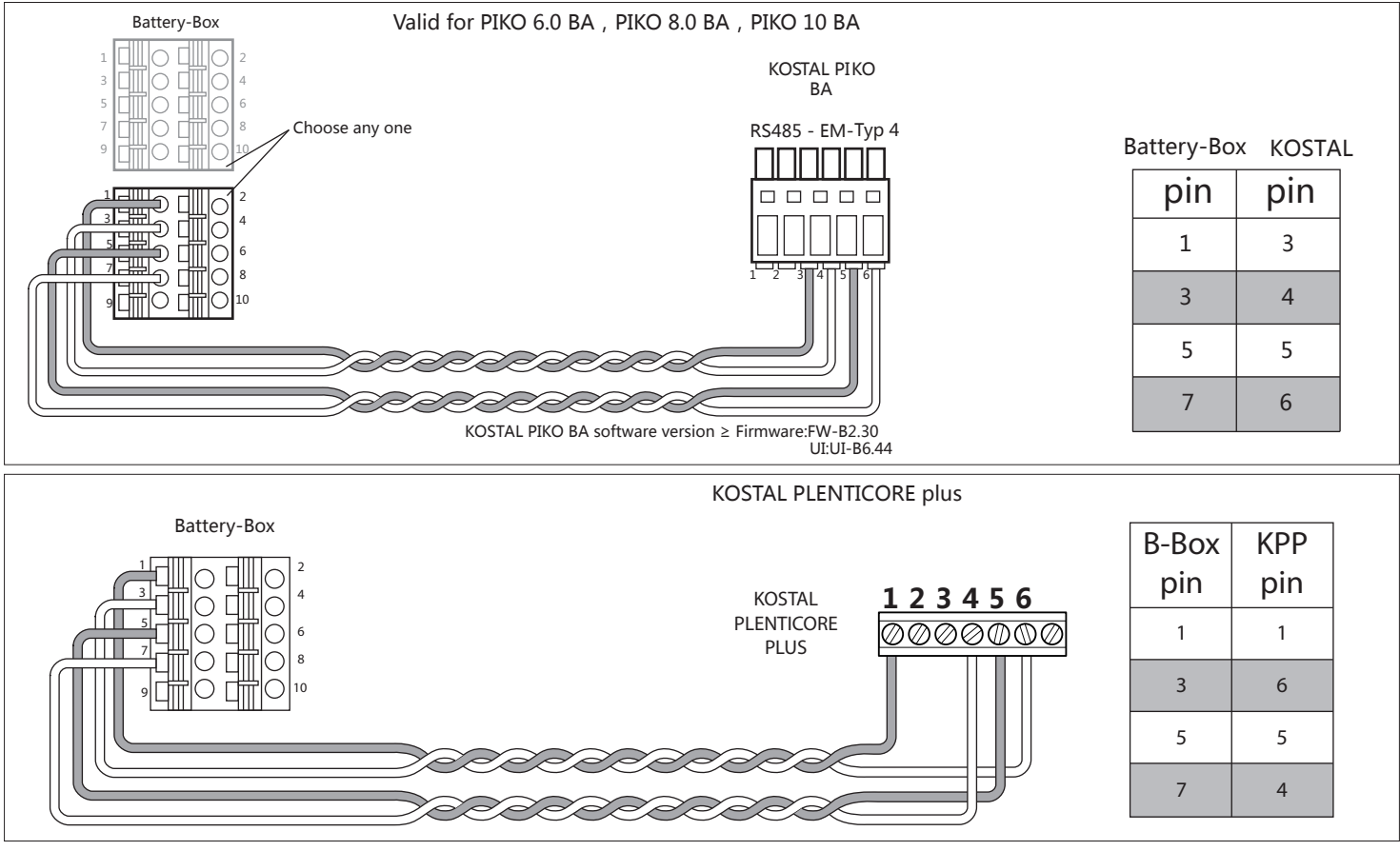
Set Battery parameters in the SMA inverter:



No.	SMA SBS Parameter	
1	Battery-Areas of application-Lower Imt deep disch.Protect area prior shutdown Battery-Nutzungsbereiche-Untere Grenze des Tiefenladenschutzbereichs vor Abschaltung	2%
2	Battery-Areas of application-Minimum width of deep discharge protection area Battery-Nutzungsbereiche-Minimale Breite des Tiefenladenschutzbereichs	3%
3	Battery-Areas of application-Area width for conserving battery sate of charge Battery-Nutzungsbereiche-Breite des Bereichs zur Erhaltung des Batterieladezustands	3%
4	Battery-Areas of application-Minimum width of own consumption area Battery-Nutzungsbereiche-Minimale Breite des Tiefenladenschutzbereichs	100%

SMA Sunny Boy Storage 2.5 software version ≥ SBS2.5-V2.04.23

13b. KOSTAL PIKO BA

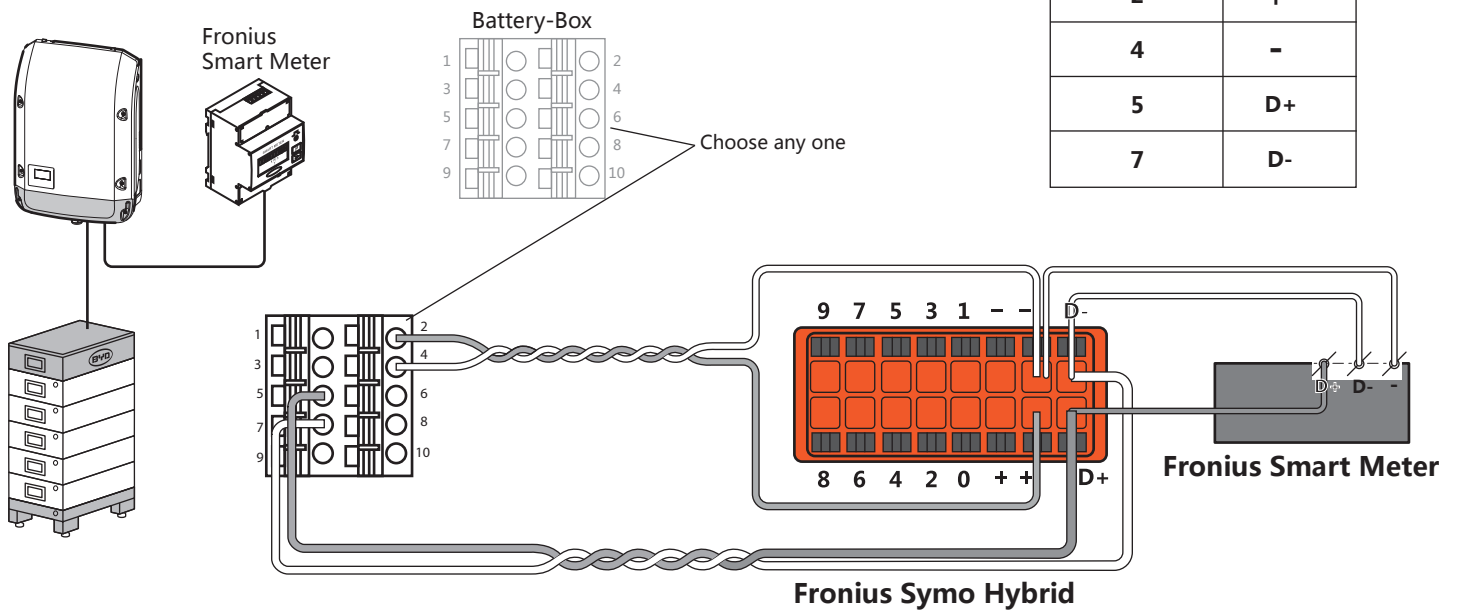


13c. Fronius Symo Hybrid

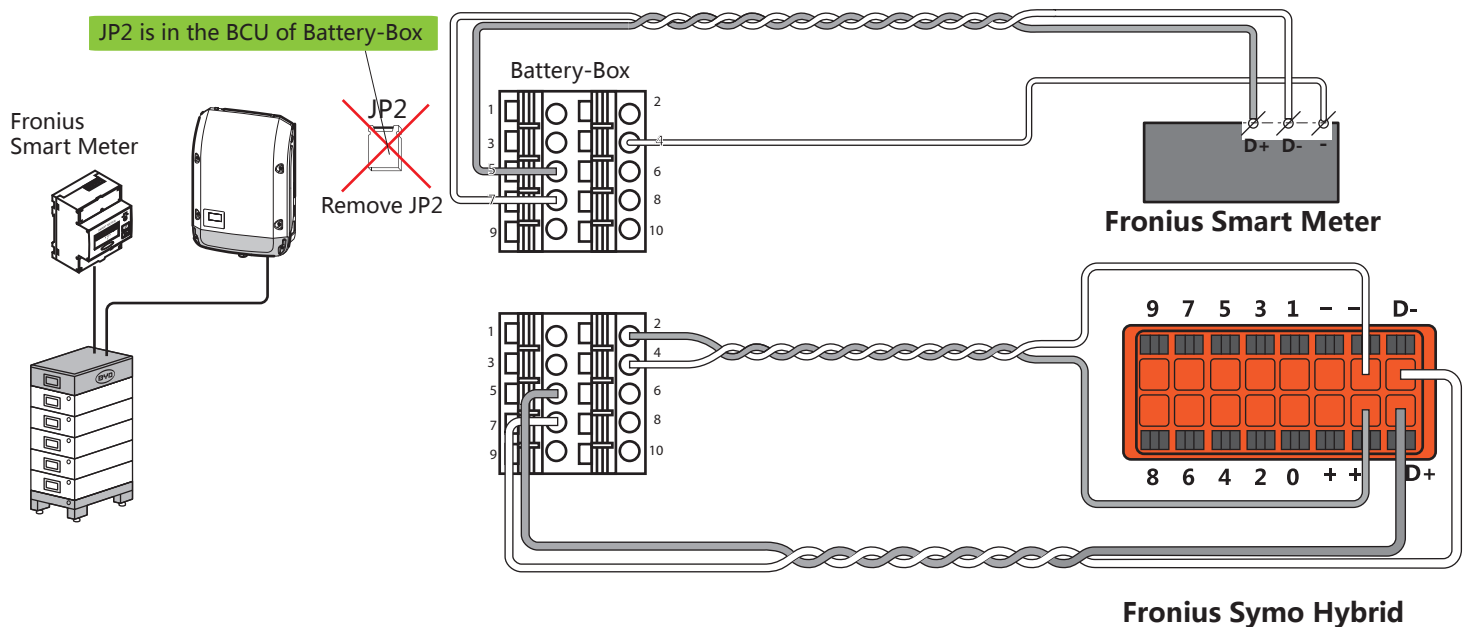
Please refer to the inverter installation manual for detailed wiring.

1. When connecting the meter in the second connection mode, the jumper cap above the JP2 in the BCU PCBA must be unplugged. If not unplugged, it is possible that the Battery-Box and inverter will not be able to communicate properly.
2. Due to simplicity of installation, connection method 1 is recommended.

Connection method 1

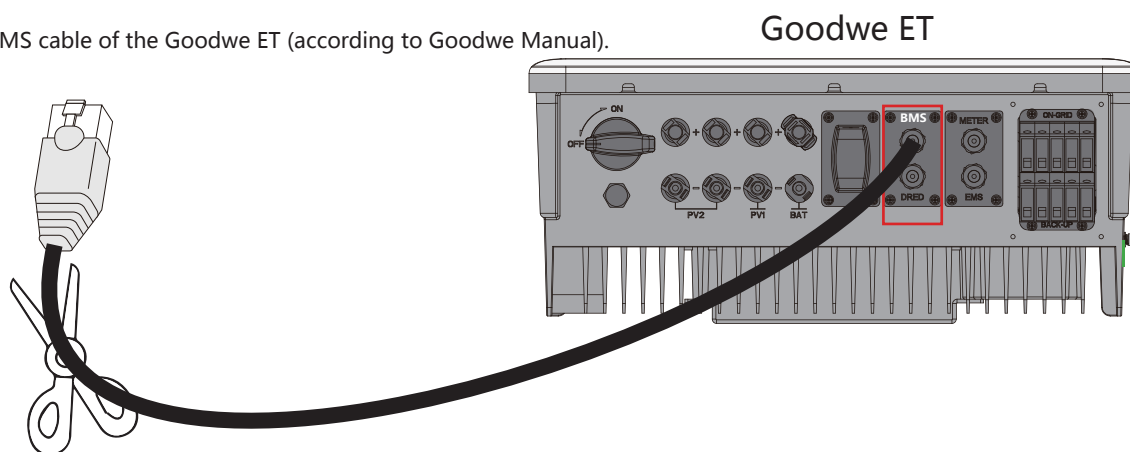


Connection method 2

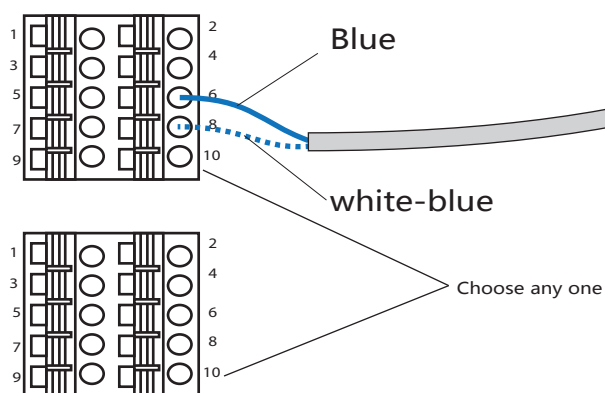


13d. Goodwe ET Inverter

- ① 1 Cut the BMS cable of the Goodwe ET (according to Goodwe Manual).



- ② Connect the blue PIN to terminal block position 6 and the white-blue PIN to terminal block position 8, according to the picture.



- ③ Download the **EzViewer** for setting the inverter



ANDROD

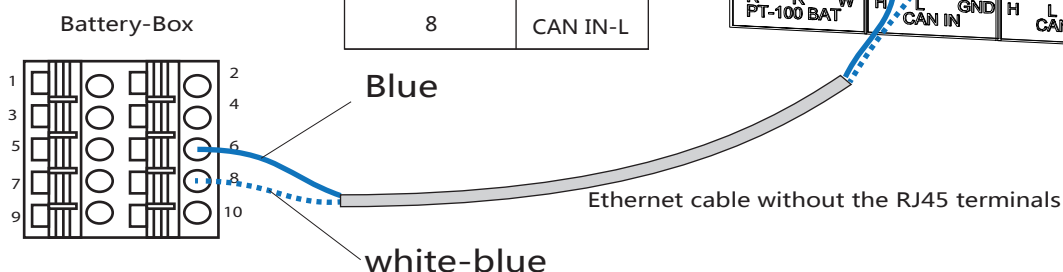
- ④ Setting the inverter



IOS APP Store

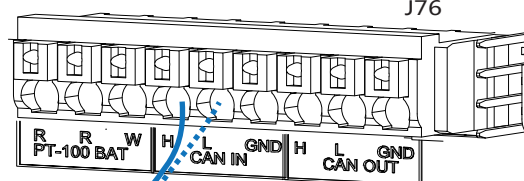
13e. Ingeteam Ingecon Sun Storage 3TL and 6TL

Battery-Box Pin	Ingeteam pin
6	CAN IN-H
8	CAN IN-L



Ingeteam

J76

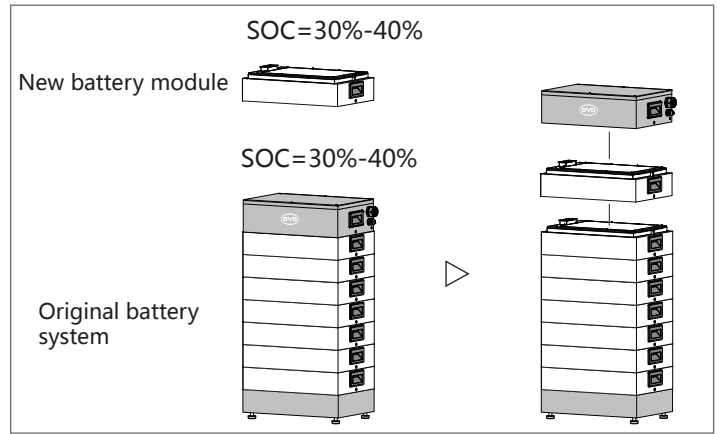


Ethernet cable without the RJ45 terminals

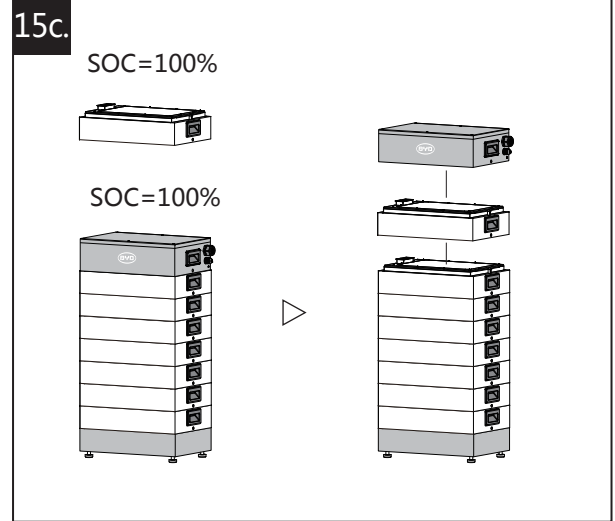
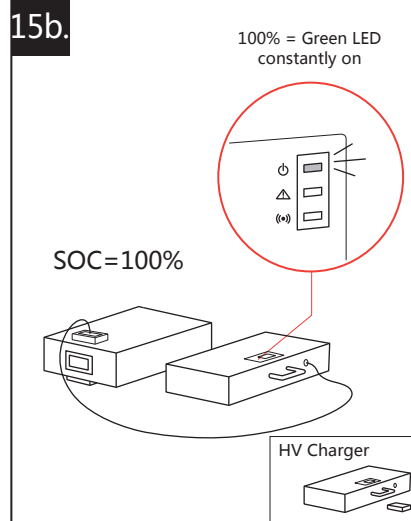
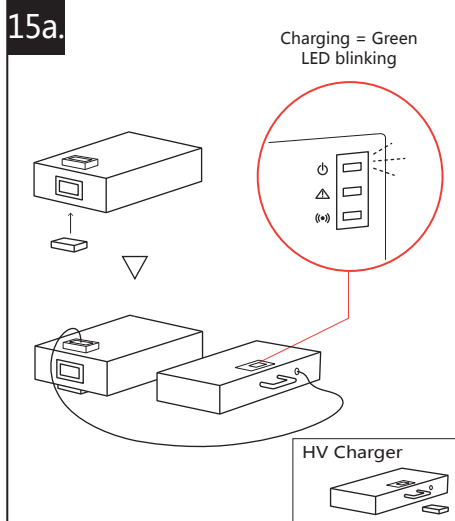
Battery-Box HIGH VOLTAGE EXTENSION

Without charger

14. Charge or discharge the original battery module so that its SOC becomes 30% to 40%, and add another battery module. The actual SOC difference will be automatically balanced in the next 2 weeks or so. (Battery-Box capacity may not be enough during this time, this is normal)



With charger



15d.

Battery-Box HV

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Installation Config

Statistics Information

Current Alarm

History Alarm

Run Date

Set Password

Update

1 STEP 1 2 STEP 2 3 FINISH & REBOOT

Time and Date * Hour : Min : Day : Month : Year :

Next

1 STEP 1 2 STEP 2 3 FINISH & REBOOT



These parameters is important.
Please make sure the correct configuration for these parameters,
otherwise the system might not work normally.

Server IP Address *

Series Battery Conts *

Inverter *

Country *

Asterisk(*)Indicates required fields

bboxhserver.byd.com.cn

n+m

SMA

Last

Next

n=3-8 Modules
m=1-6 new Modules
Up to a maximum of 9

1 STEP 1 2 STEP 2 3 FINISH & REBOOT

Reboot System...
Please wait about 50 seconds.