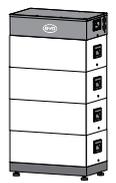




# BYD Battery-Box HV QUICK INSTALLATION GUIDE

Valid for Battery-Box H 5.0/7.5/10.0



USA V2

## Important

Skilled personnel only:

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.

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.

• If unable to complete installation or having issues with commissioning the system, be sure to turn off the battery system switch before leaving the site, 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.

• Please read the quick installation guide and installation manual carefully before installation.

• Please download and view the installation manual on this website: [www.eft-systems.de/US\(Support->Downloads\)](http://www.eft-systems.de/US(Support->Downloads))



## Installation environment requirements

Max.  
+50°C

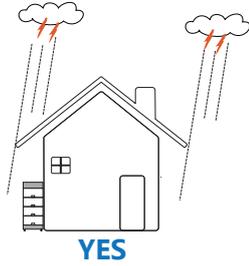
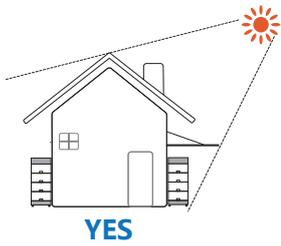


Min.  
-10°C



RH.

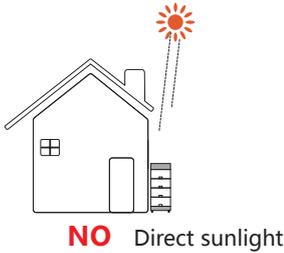
+5%~+95%



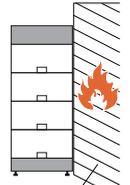
**YES**



Fire-resistant locations only  
(Concrete/Drywall/Exterior Siding Etc.)



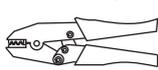
**NO**



Flammable wall Flammable  
Materials, Gas, Furnace, Etc

## Tools

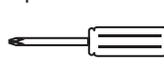
Wire Crimp



Precision screwdriver



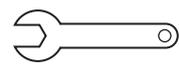
Phillips screwdriver



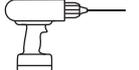
Levelling instrument



Wrench



Power drill



## Packing list

Packing of BCU+BASE

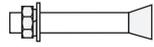
① M6 ×6



② Black sealing plug ×4



③ Expansion bolt ×3



④ OT terminal for P+/P-×4



Packing of B-Plus H 2.5

⑤ Black sealing plug ×2



⑥ M6 ×2

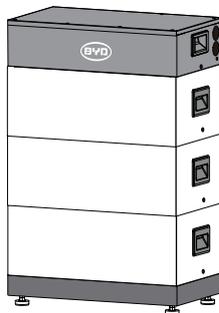


## Overall structure

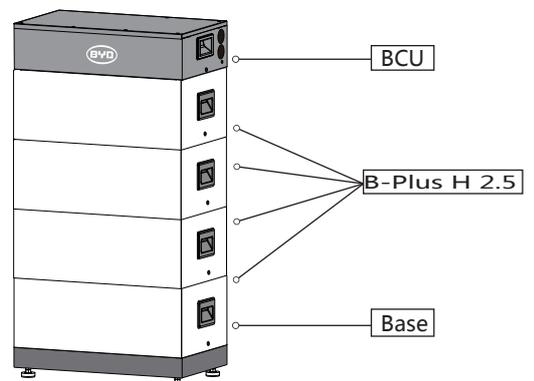
Battery-Box H 5.0



Battery-Box H 7.5



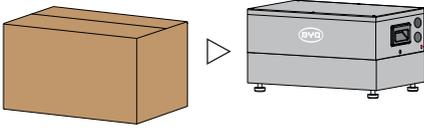
Battery-Box H 10.0



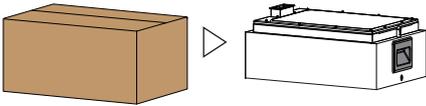
# Installation steps

## 1. Unpack

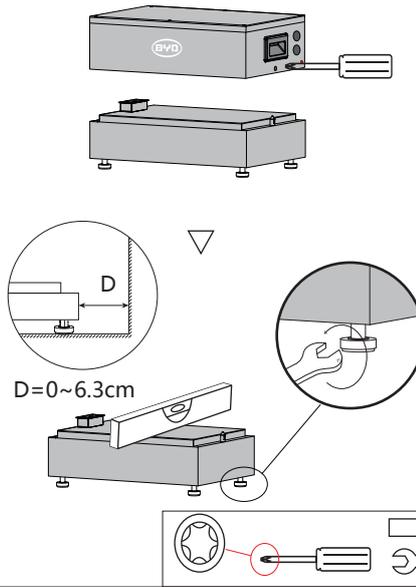
BCU + Base



\*n=2, 3, 4 B-Plus H

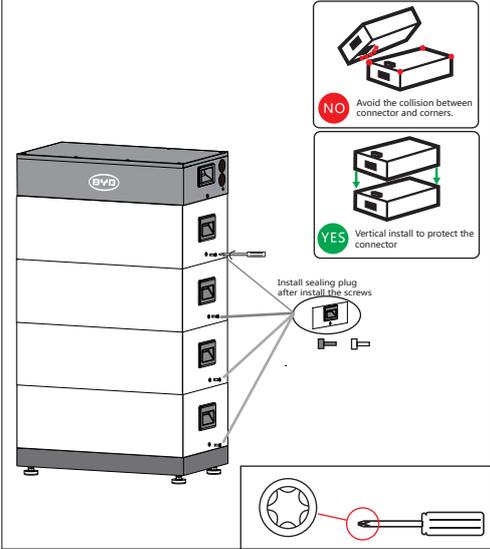


## 2. Separate base and BCU



## 3. Install battery and BCU

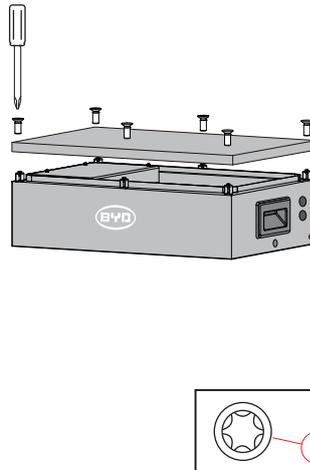
Before installing BCU, make sure the system switch is switch off.



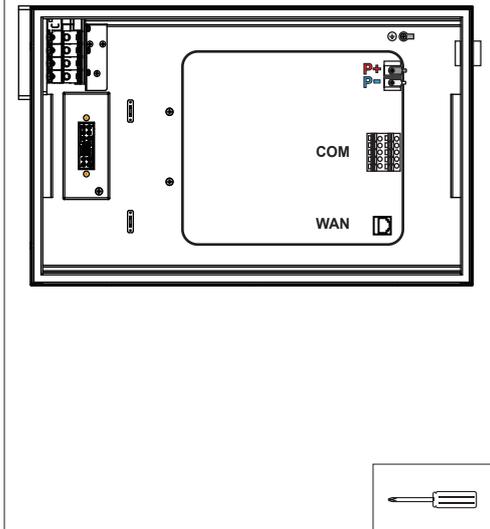
## 4. Install Wall-mount



## 5. Open the BCU cover



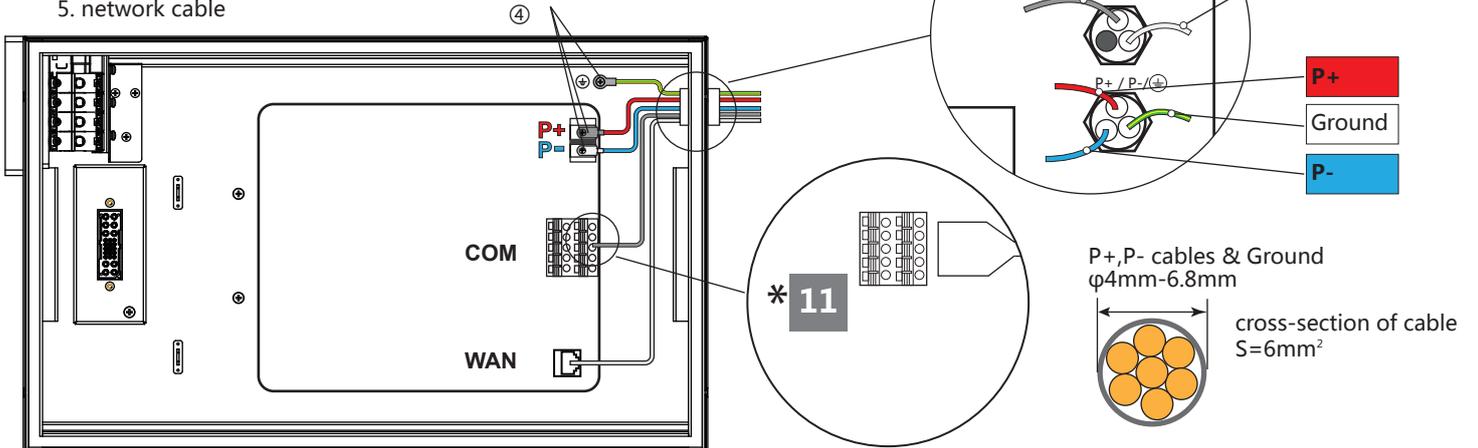
## 6. BCU internal overview



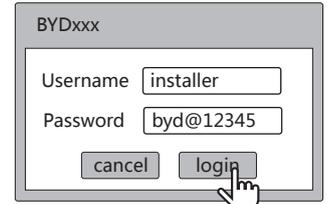
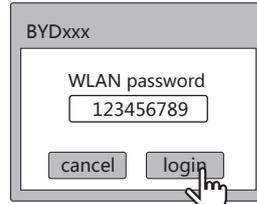
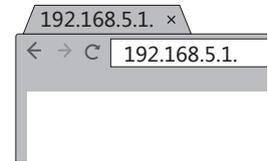
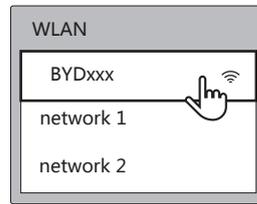
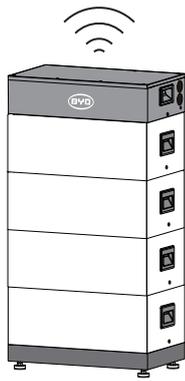
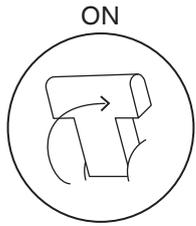
## 7. Connect cables

Connection sequence of BCU

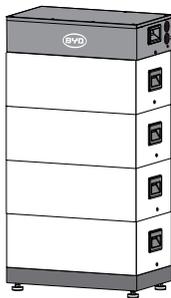
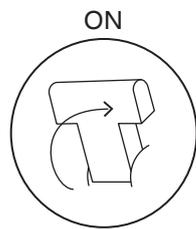
1. Ground cable.
2. Negative cable
3. Positive cable.
4. Communication cable(CAN H, CAN L, EN 11V+, EN 11V-)
5. network cable



## 8a. Connect through WIFI



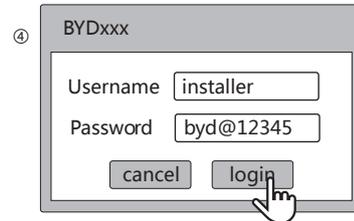
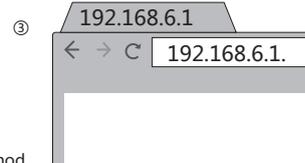
## 8b. Connect through ethernet cable



- ① Connect the network cable
- ② Set your computer IP into a static IP

IP address:192.168.6.10  
Subnet mask:255.255.255.0

Setting method reference computer system setting method



## 9. 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 \*

Series Battery Conts \*

Inverter \*

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.

Note: It may take up to 10 minutes for the Inverter to recognize and establish communications with the Battery

## 10. Update the firmware

- ☆ Please update the latest software after installation.
- Update software: <https://www.eft-systems.de/us/downloads>



Update

Please input the file:

Please input file:

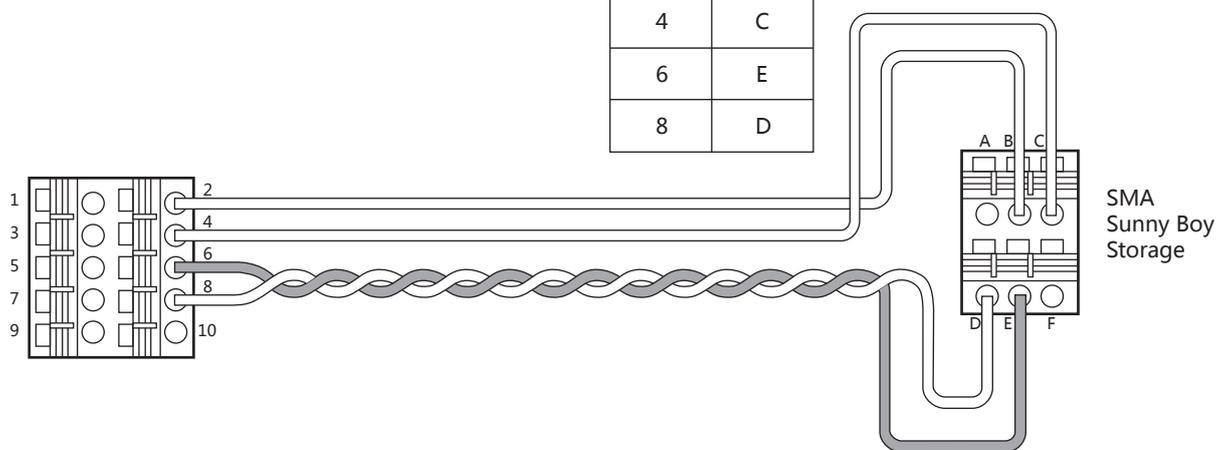
If there is any new version on the server, clicking **UpdateCheck** will update the syesem.

# 11 SMA SUNNY BOY STORAGE 3.8/5.0/6.0

Please refer to the inverter installation guide for inverter side connections as their may be updates/changes

BYD  
Battery-Box SBS

pin	pin
2	B
4	C
6	E
8	D



BYD requires setting the following parameters for SMA inverter

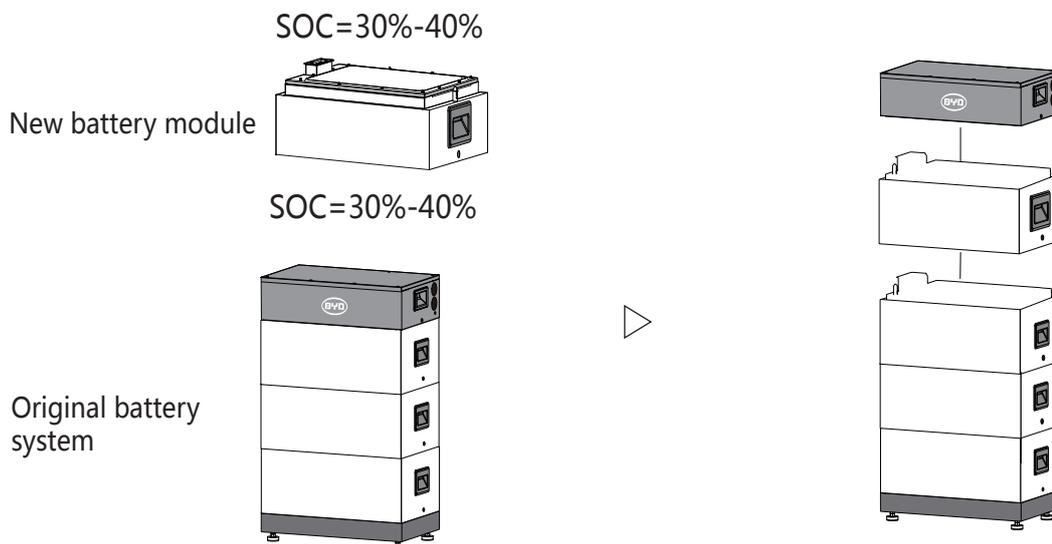


No.	SMA Sunny Boy toratge Parameter	
1	Battery-Areas of application-Lower Imt deep disch.Protect area prior shutdown	2%
2	Battery-Areas of application-Minimum width of deep discharge protection area	3%
3	Battery-Areas of application-Area width for conserving battery sate of charge	3%
4	Battery-Areas of application-Minimum width of own consumption area	100%

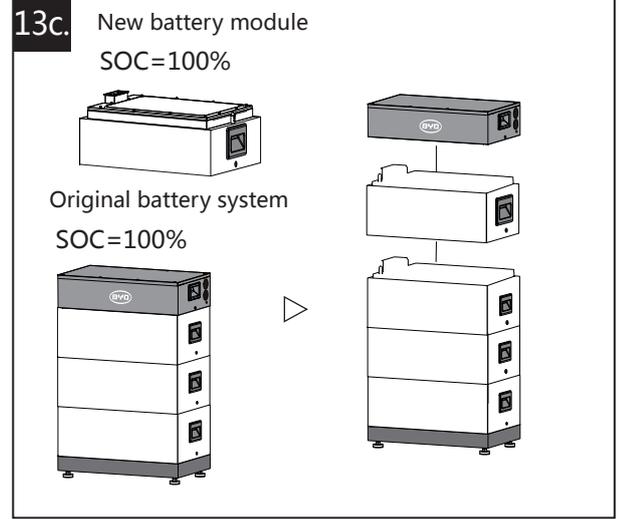
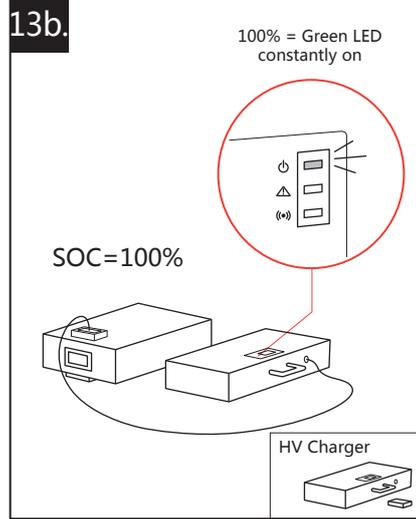
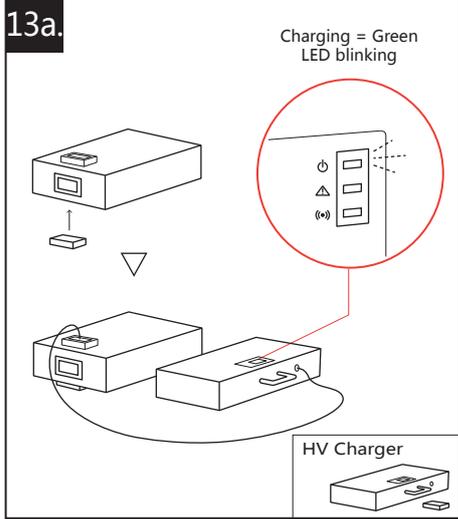
## Battery-Box HIGH VOLTAGE EXTENSION

Without charger

12. Charge or discharge the original battery system 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



# 13d.

## Battery-Box HV

- Privacy Policy
- Installation ▶
- Home
- Device Information
- Installation Config
- Statistics Information
- Current Alarm
- History Alarm
- Run Date
- Set Password
- Update

1 — 2 — 3  
STEP 1      STEP 2      FINISH & REBOOT

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

1 — 2 — 3  
STEP 1      STEP 2      FINISH & REBOOT

Server IP Address \*   

Series Battery Conts \*   

Inverter \*   

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.**

n=1-3 Modules  
m=1-3 new Modules  
Up to a maximum of 4

1 — 2 — 3  
STEP 1      STEP 2      FINISH & REBOOT

Reboot System...  
Please wait about 50 seconds.