



BYD Battery-Box Pro

QUICK REFERENCE GUIDE

Valid for Battery-Box Pro 2.5/5.0/7.5/10.0

Target Group

V5



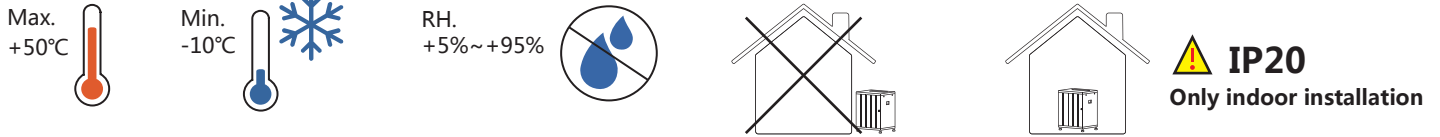
Skilled personnel recognized

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.

Installation environment requirements

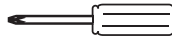


Tools

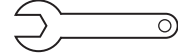
Sleeves



Phillips screwdriver

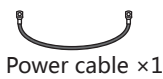
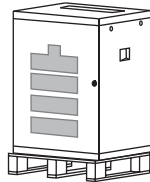
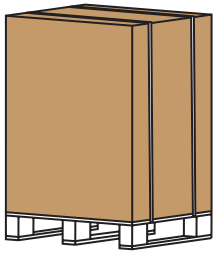


Wrench



Packing list

Cabinet



Power cable ×1

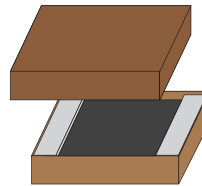


Leveling Mounts ×4

B-Plus



B-Plus



Grounding cable



network cable



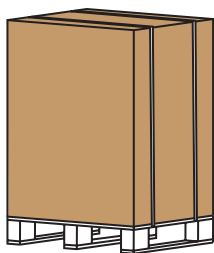
power cable +



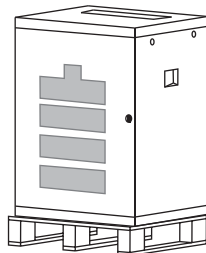
power cable -

Installation steps

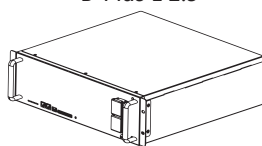
1. Unpacking



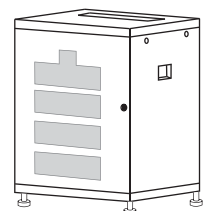
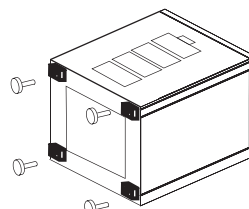
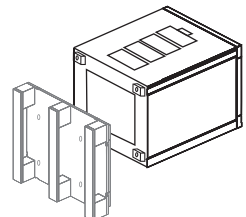
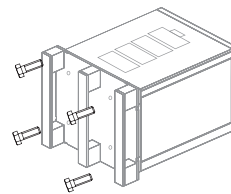
Cabinet



B-Plus L 2.5

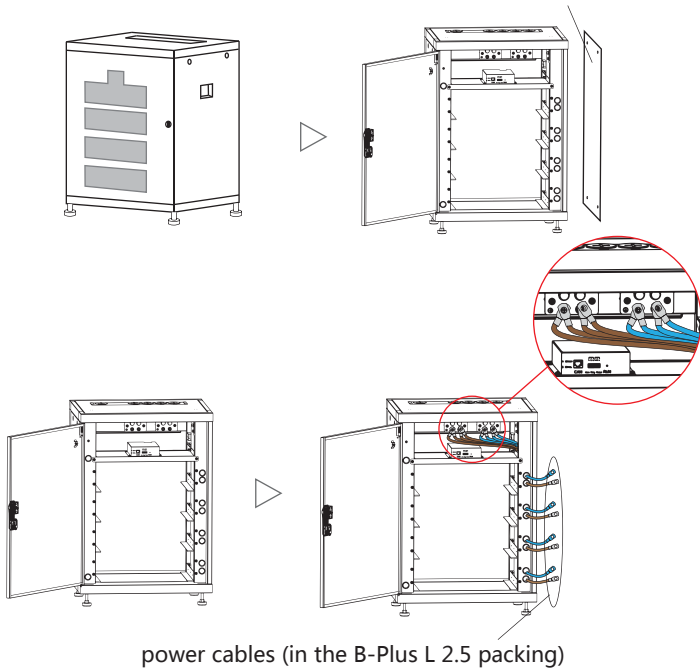


2. Install anchor bolt

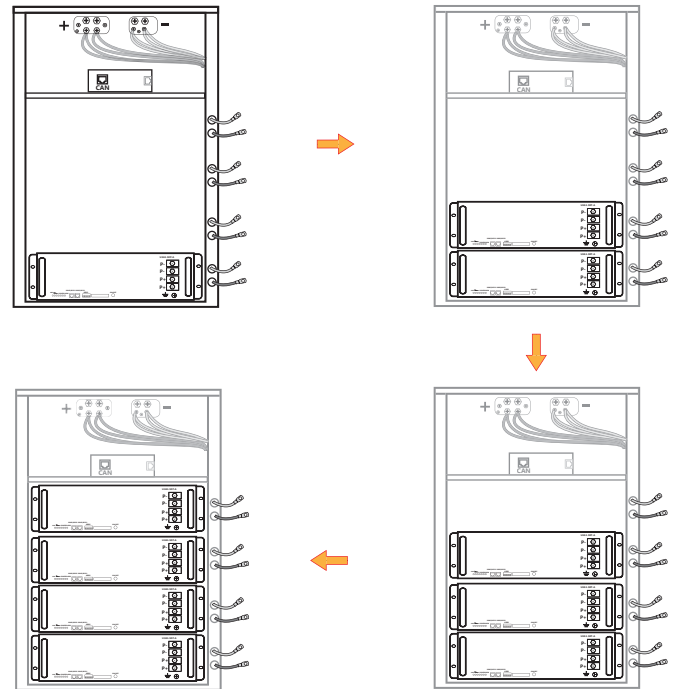


3. Connecting power cables

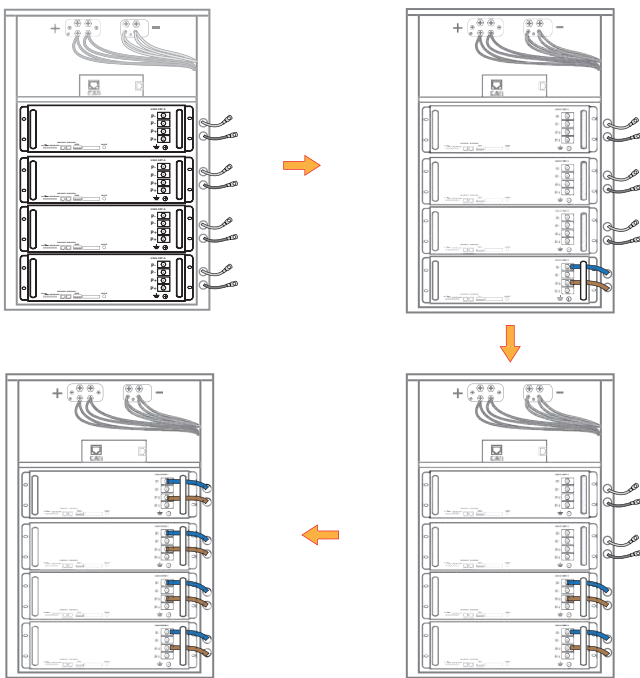
Open the door & remove the side door



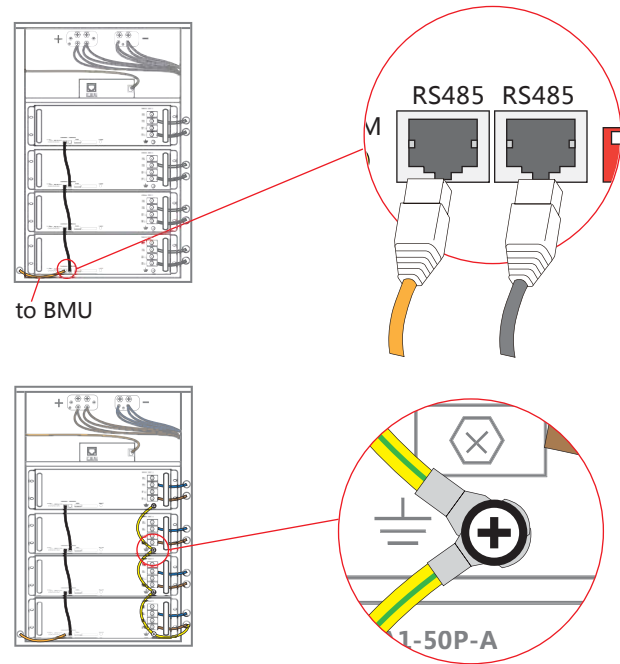
4. Install B-Plus L 2.5



5. Connect the power cables to B-Plus L2.5

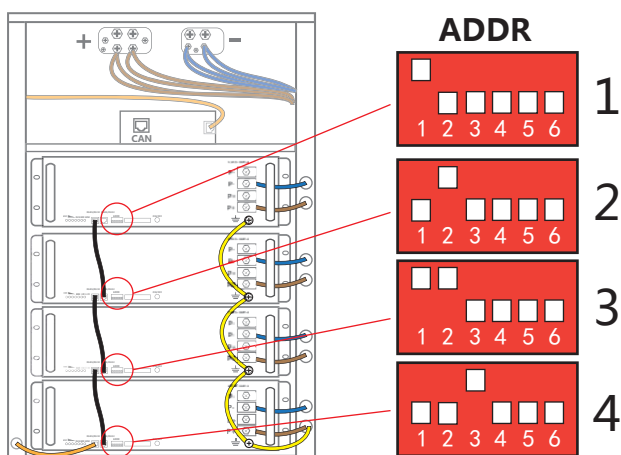


6. Connect the grouding & communication cable



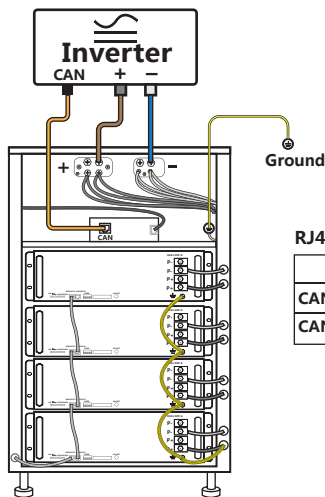
7. Address setting

The address of the BMS must start with 1, must be consecutive, can not have 0. Only the BMU with the last address is connected to the inverter.



ADDRESS					
ADDR	DIP	ADDR	DIP	ADDR	DIP
		11	110100	22	011010
1	100000	12	001100	23	111010
2	010000	13	101100	24	000110
3	110000	14	011100	25	100110
4	001000	15	111100	26	010110
5	101000	16	000010	27	110110
6	011000	17	100010	28	001110
7	111000	18	010010	29	101110
8	000100	19	110010	30	011110
9	100100	20	001010	31	111110
10	010100	21	101010	32	000001

8. Single Battery-Box connect to inverter



Please set the parameters of the inverter correctly according to the installation manual and the instructions of the inverter manual. Failure to do so may result in the system not working or even being damaged.

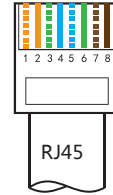


It is possible that each inverter communication cable is in a different order. Please make the communication cable according to the following sequence. Some inverter communication cables

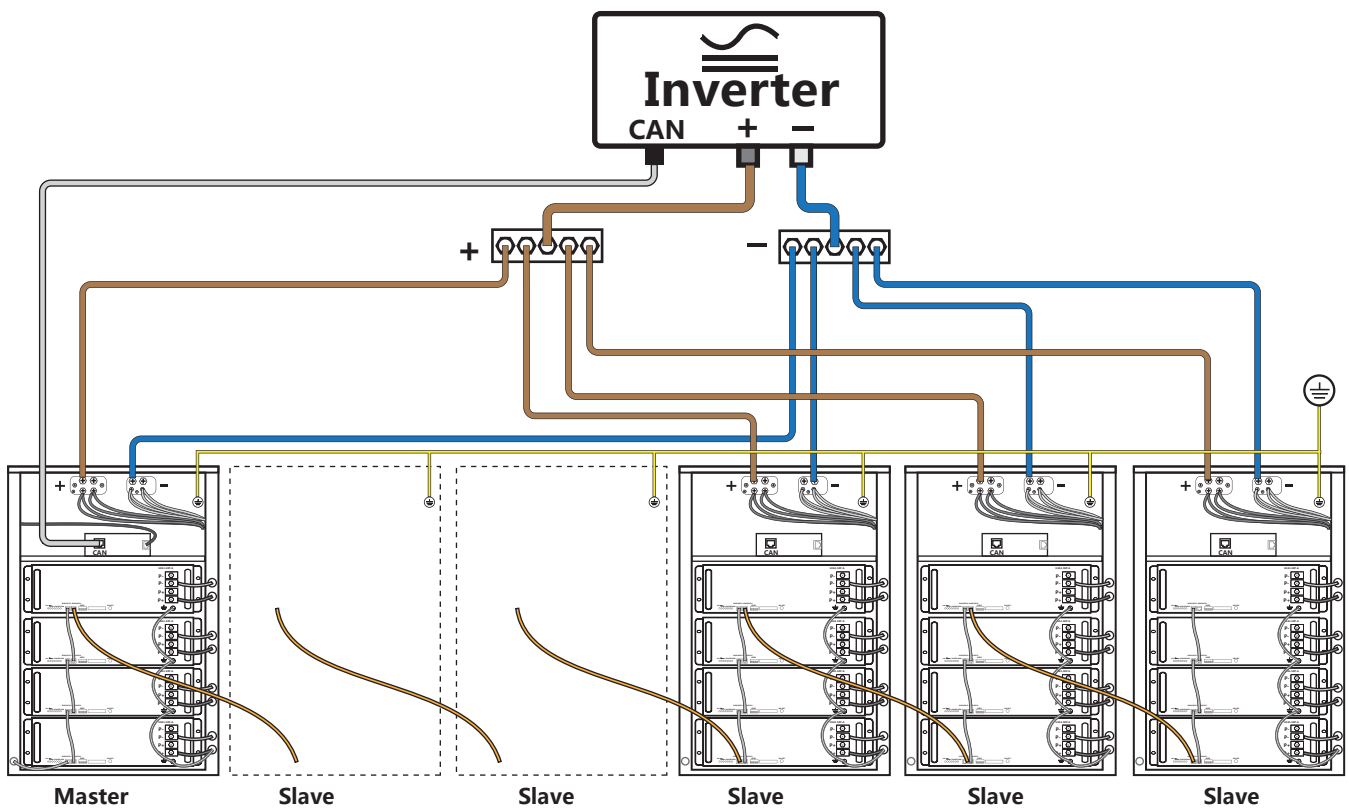
RJ45 Pin define (Battery-Box LV & inverter)

	Battery-Box	SMA	GOODWE	VICTRON	SUNGROW	SELECTIONICS	SOLAX
CAN H	4	4	4	7	5	1	1
CAN L	5	5	5	8	4	2	2

1-8



9. Installation complete for multicluster Battery-Box

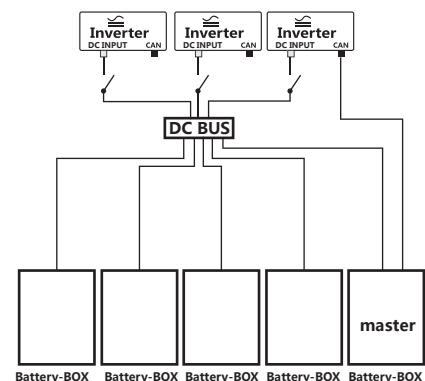


Please assemble the system according to the minimum configuration in the user manual. If more than two inverters are installed in the system, Install switches for each inverter.

(Because after the Battery-Box starts, will charge to the inverter the capacitance, in the short time the current is very big, causes the Battery-Box to enter the protection mode, cannot continue to charge to the inverter, in this case, the inverter will not be able to start.)



The address of the BMS must start with 1, must be consecutive, can not have 0. Only the BMU with the last address is connected to the inverter.



Diese Anleitung stellt eine verkürzte Aufbauhilfe dar, und ersetzt nicht die original Anleitung der Battery-Box, erhältlich auf www.eft-systems.de oder www.byd.com. Installation darf nur von Fachleuten durchgeführt werden. Achtung Li-Ionen Speicher! Bei unsachgemäßer Handhabung kann Gefahr für Leib und Leben entstehen. Für weitere Informationen oder Kontakt: www.eft-systems.de

This manual is a shortened assistance for the installation of the Battery-Box and does not replace the original manual, which can be found on www.eft-systems.de or www.byd.com. The installation must be carried out by a qualified expert. Attention, Li-Ion Storage! Improper handling can cause danger and damage. Australia : <http://alpspower.com.au>

10 Check

- a** Is the power cables connection correct? ☐ YES / ☐ NO
- b** Is the communication cable connected correctly? ☐ YES / ☐ NO
- c** Has the battery's address been set correctly? ☐ YES / ☐ NO
- d** Is the battery reliably grounded? ☐ YES / ☐ NO
- e** Is the inverter set correctly? ☐ YES / ☐ NO
- f** Are the other connections and setting correct? ☐ YES / ☐ NO

11. How to start and power off the system

Start

- 1** Press "ON/OFF" to start the battery
The battery's LED flashes, and after 4 seconds the SOC LED green light and the run green light, the battery is started normally.
- 2** According to inverter manual, start inverter correctly
Turn off all loads before starting the inverter.
- 3** Turn on the load and power in
Input / output needs to meet battery and inverter ratings.
Ratings can be found in specifications or user manuals.



Power off

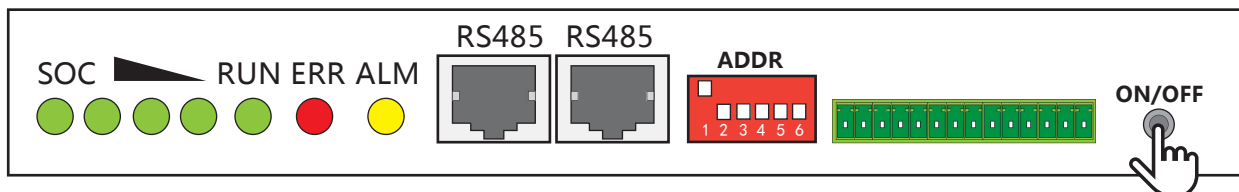
- 1** Close the power of loads and input.
- 2** Close the inverter according to inverter manual
- 3** Press the on / off button for 4.5 seconds to close the battery
Shut down all batteries.



Warning: incorrect ordering can cause the system can't work normally or even to be damaged!
If the system does not work, please turn off the battery before you leave to avoid damage caused by the battery vent.

12. LED Indications

- LED off
- ⬤ LED blink
- LED illuminated



	SOC RUN ERR ALM	description	Statu	Reason	Disposal method
1	○ ○ ○ ○ ○ ○ ○	all LED was off	Battery off		
2	⬤ ⬤ ⬤ ⬤ ⬤ ⬤ ⬤	all LED was blink Lasts 4 seconds.	Battery start-up process		
3	○ ⬤ ⬤ ⬤ ⬤ ⬤ ○ ○	SOC & RUN LED blink fast	Discharging		
4	○ ⬤ ⬤ ⬤ ⬤ ⬤ ○ ○	SOC & RUN LED blink Slow	Charging		
5	○ ● ● ● ● ● ○ ○	SOC & RUN LED illuminated	Idle		
6	○ ● ● ● ● ● ○ ●	SOC & ALM LED illuminated	Protected	There may be short-circuit, over-voltage, over-current, over-temperature, faulty wiring and so on.	Eliminate errors
7	○ ● ● ● ● ● ● ○	SOC & ERR LED illuminated	System failure	Battery or BMS damage	Contact the after-sales service provider. Replac batteries or BMS
8	○ ○ ○ ● ● ○ ○	SOC LED flashes sequentially from right to left	communication failure	BMS - BMU communication failure or BMU - inverter communication failure	Check communication cable

