



BYD Battery-Box Pro

QUICK REFERENCE GUIDE

Valid for Battery-Box Pro 13.8

Target Group

V 8



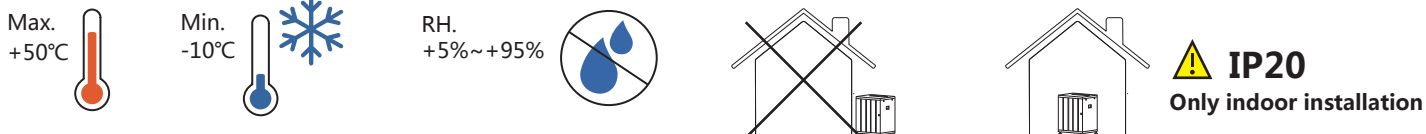
Skilled personnel recognized

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

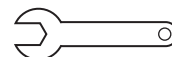
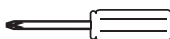
A skilled worker is defined as a trained and qualified electrician or installer who has all of the following skills and experience:

- 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.
- Make sure the two battery modules in one wooden case to be paired installed in one cabinet.
- The battery module must be installed in the BYD cabinet unless approved by BYD. Otherwise it will be outside the warranty.

Installation environment requirements



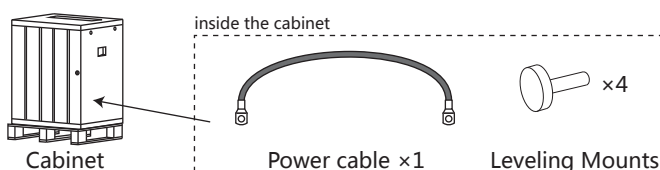
Tools



Packing list

Before installation, please inspect the unit. Be sure that nothing inside the package is damaged. You should have received the following items inside of package:

Cabinet

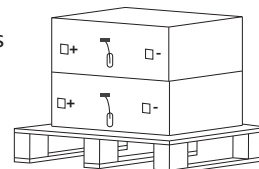


Battery crate

Battery module ×2

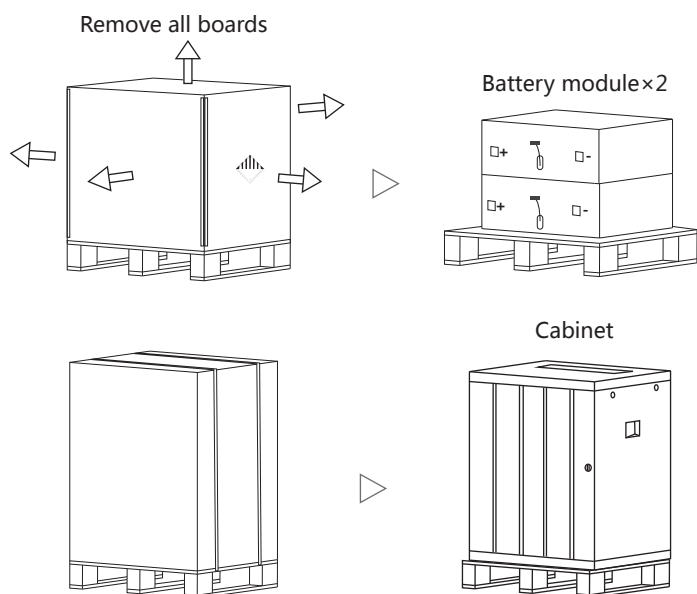


Make sure the two battery modules in one wooden case to be paired installed in one cabinet.



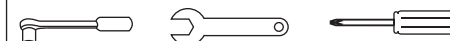
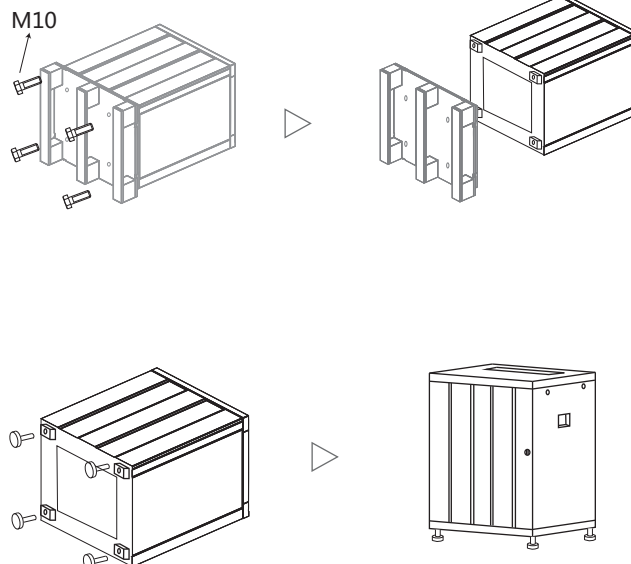
Installation step

1. Unpacking

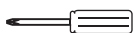
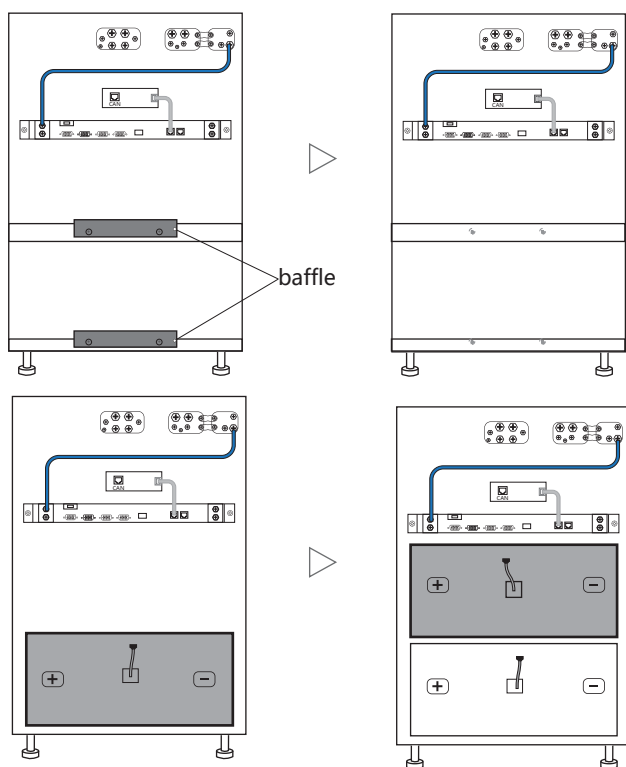


Please note that after opening the carton, the key is in the upper-left corner.
Please don't lose your keys.

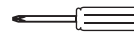
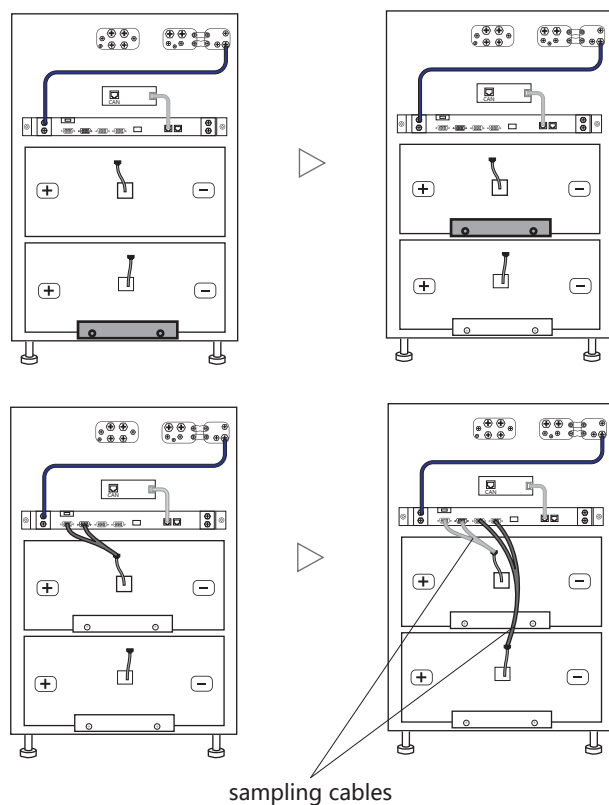
2. Install anchor bolt



3. Remove the baffle & install battery modules

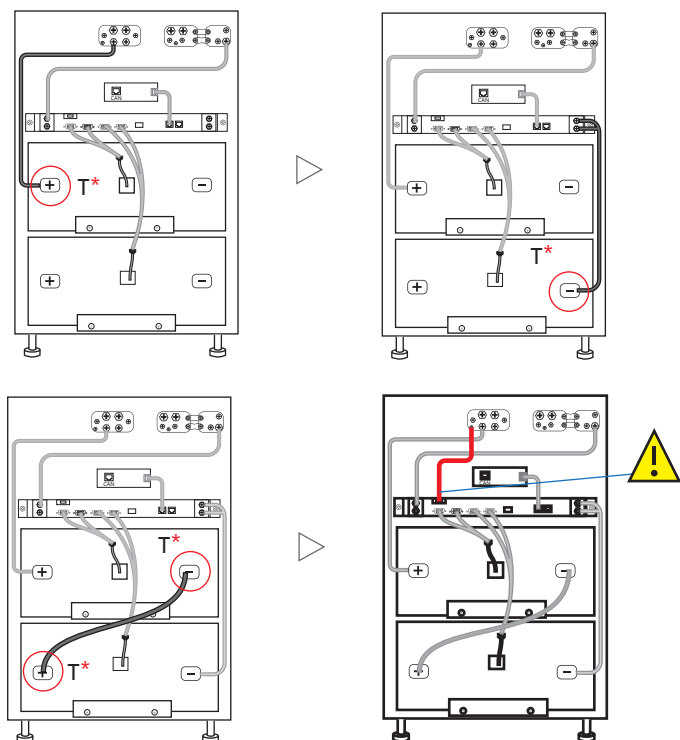


4. Install the baffle & sampling cables



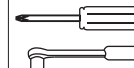
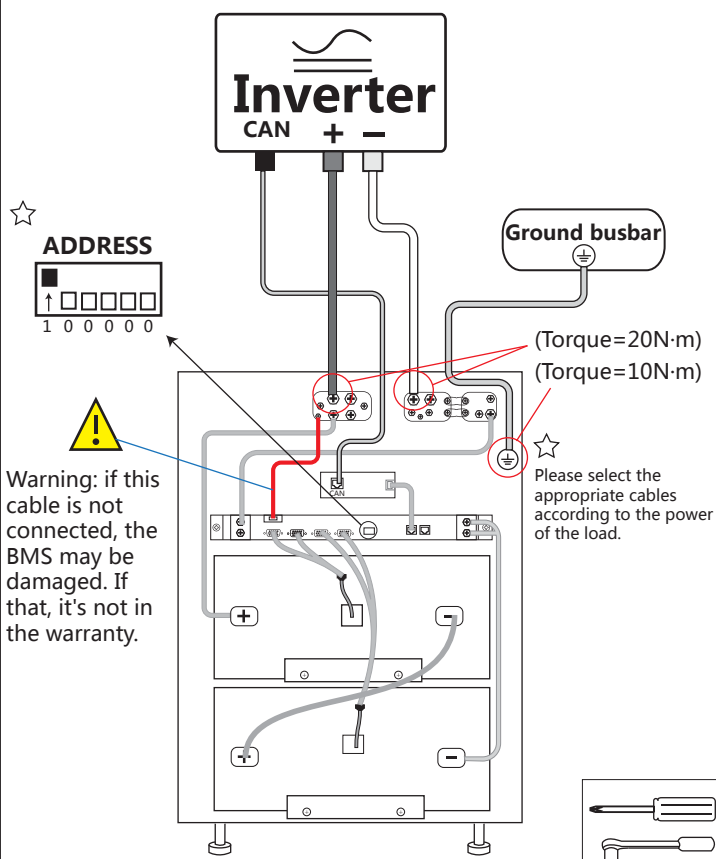
5. Connecting power cables

T* (Torque=10N·m)



6. Installation complete for single system

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.

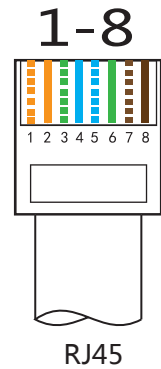
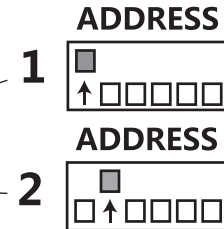
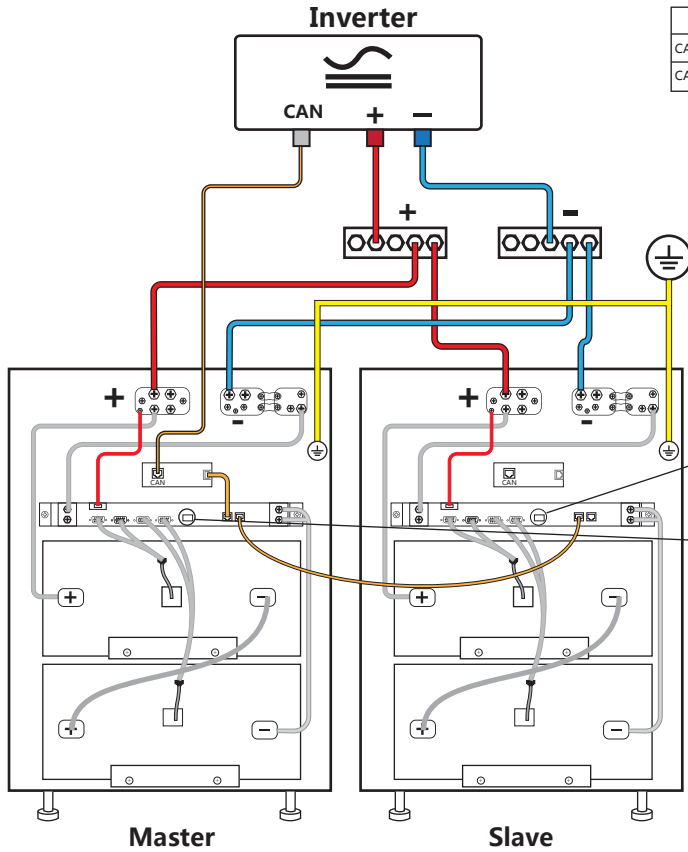


7. Installation of 2 Battery-Box Pro 13.8 systems

RJ45 Pin define (Battery-Box LV & inverter)

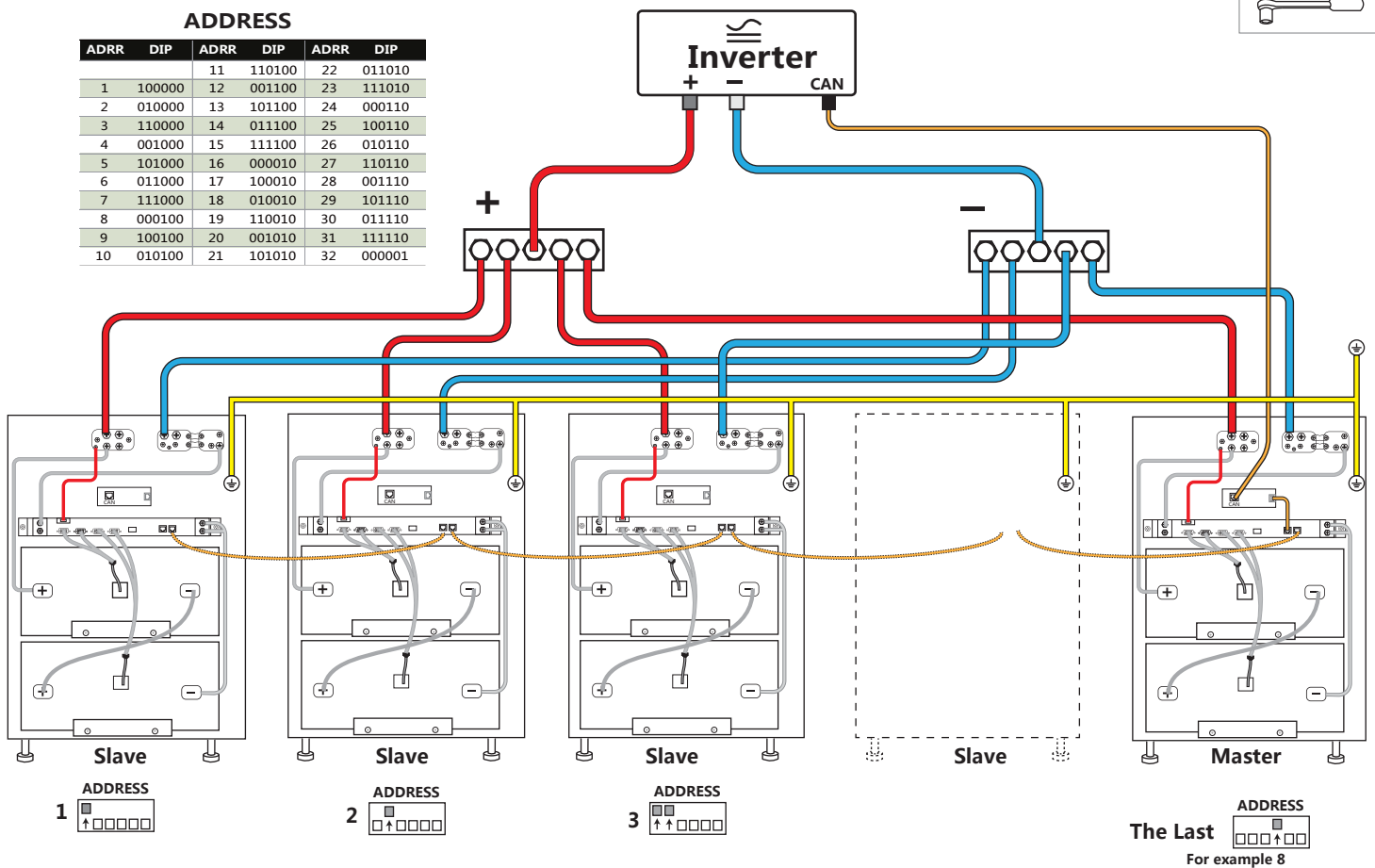
	Battery-Box	SMA	GOODWE	VICTRON	SUNGROW	SELECTRONICS	SOLIS	IMEON	STUDER Mender
CAN H	4	4	4	7	CAN H	1	4	1	4
CAN L	5	5	5	8	CAN L	2	5	2	5

Please refer to the installation manual of the inverter for the connection of the communication cable of the inverter.



8a. Installation of many Battery-Box Pro 13.8 systems

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



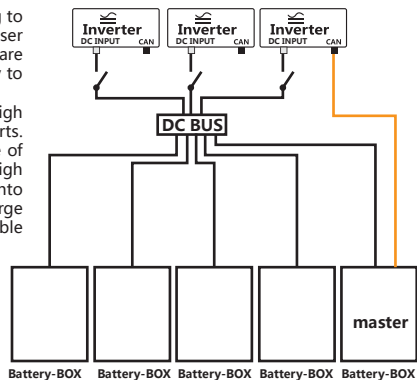
★ The address of the BMS must start with 1, must be consecutive, can not have 0.
Only the BMU with the last address is connected to the inverter.

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 <http://alpspower.com.au>. The installation must be carried out by a qualified expert. Attention, Li-Ion Storage! Improper handling can cause danger and damage.

8b.

Please assemble the system according to the minimum configuration in the user manual. If more than two inverters are installed in the system, it is necessary to install switches for each inverter. (The switches are needed to avoid high currents, when the Battery-Box starts. Without the switches the capacitance of all inverters would be charged. The high current would lead the Battery-Box into protection mode, which stops the charge of the inverters and they will not be able to start.)



9. Check

- a Are the power cables connected correctly? ☐ 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 settings correct? ☐ YES/ ☐ NO

10. 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.

ON/OFF



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
All LED will power off

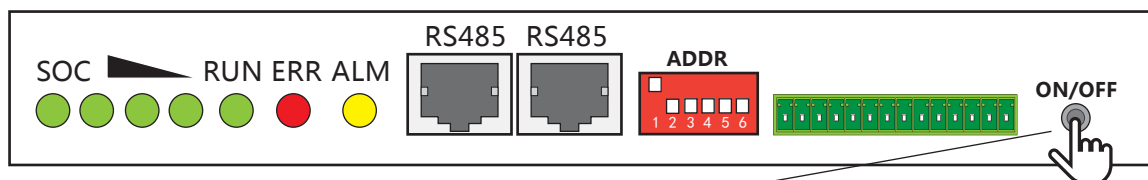
ON/OFF



⚠ **Warning: incorrect ordering can cause the system can't work normally or even to be damaged!**

11. LED Indications

- LED off
- ⬤ LED blink
- LED illuminated



After installed and checked, press the "ON/OFF" button to start the battery

	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. Replace 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

