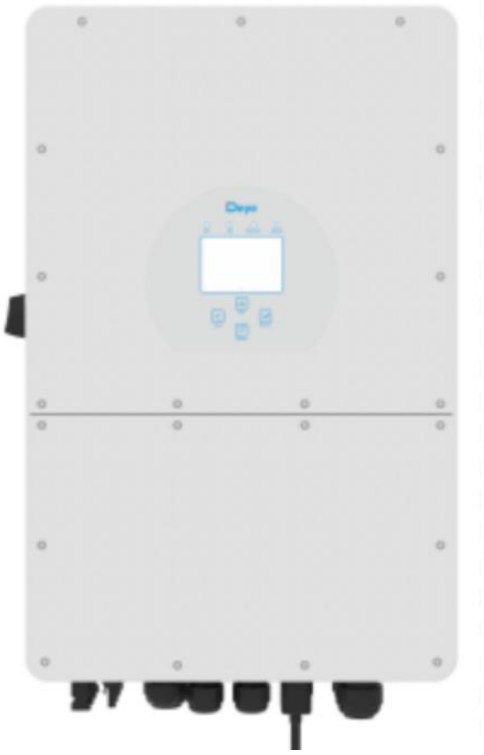
DYNESS HV4 ,HUB and DEYE SUN-50K-SG01HP3

Connection Guideline



File version-20230425-V1-EN information might be subject to change without notice during product improving.

V1.0

Note

This is an instruction for connection and commissioning between HV51100 battery and Deye SUN-50K-SG01HP3-EU-BM4.
For details of the connection and commissioning, please go to user manual of the battery and the Deye SUN-50K-SG01HP3-EU-BM4 if you cannot find it in this instruction.

Applicable Product type

- HV51100 Battery Module Type(HV51100 battery, hereinafter referred to as HV4):
  HV4-20 ESS unit/HV4-25 ESS unit/HV4-30 ESS unit/HV4-35 ESS unit/HV4-40 ESS unit/HV4-46 ESS unit/HV4-51 ESS unit/HV4-56 ESS unit
- Deye Inverter Type:
  SUN-25K-SG01HP3-EU-BM2/ SUN-30K-SG01HP3-EU-BM3/ SUN-40K-SG01HP3-EU-BM4/SUN-50K-SG01HP3-EU-BM4

Installation Steps

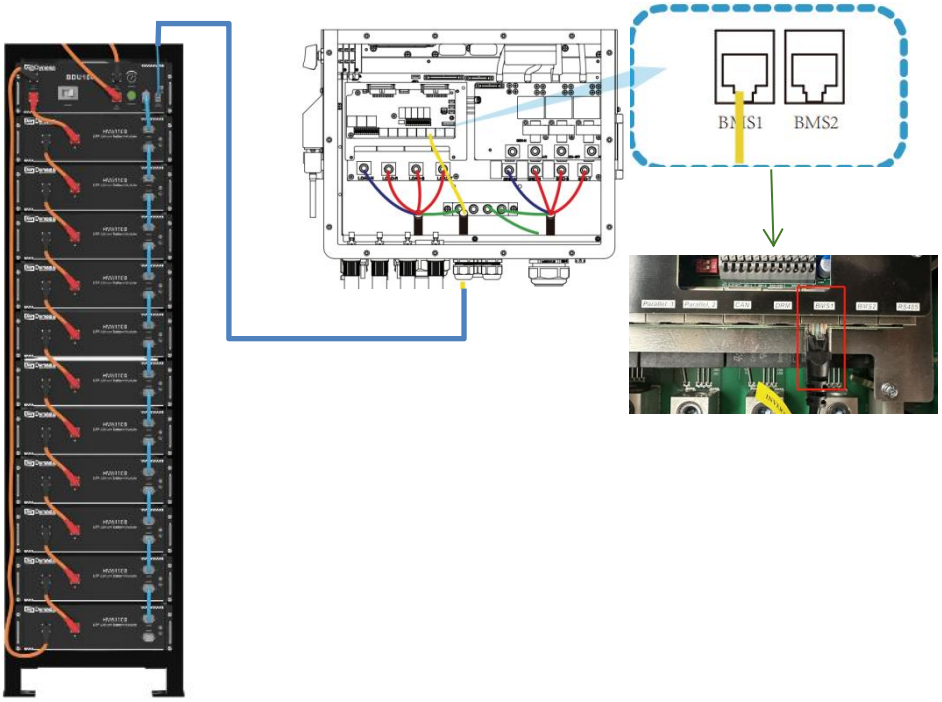
1 Install HV4 as per user manual. Take HV4-56 as an example.

2 Refer to user manual to connect energy meter, grid, loads, etc. to SUN-50K-SG01HP3.

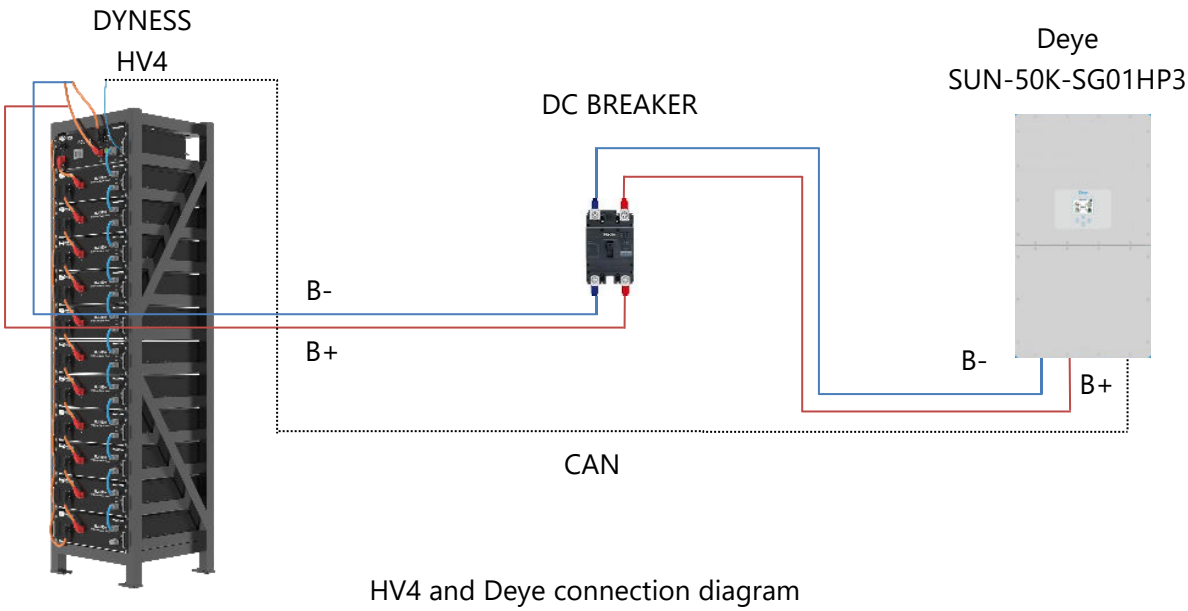
3 Connect the battery power cables to inverter. Plug the socket and plug of the battery's DC power cables onto the BAT1+ and BAT1-

4 Connect the battery communication cable to BMS1 of the inverter

BATTERY-Dyness INVERTER-Deye

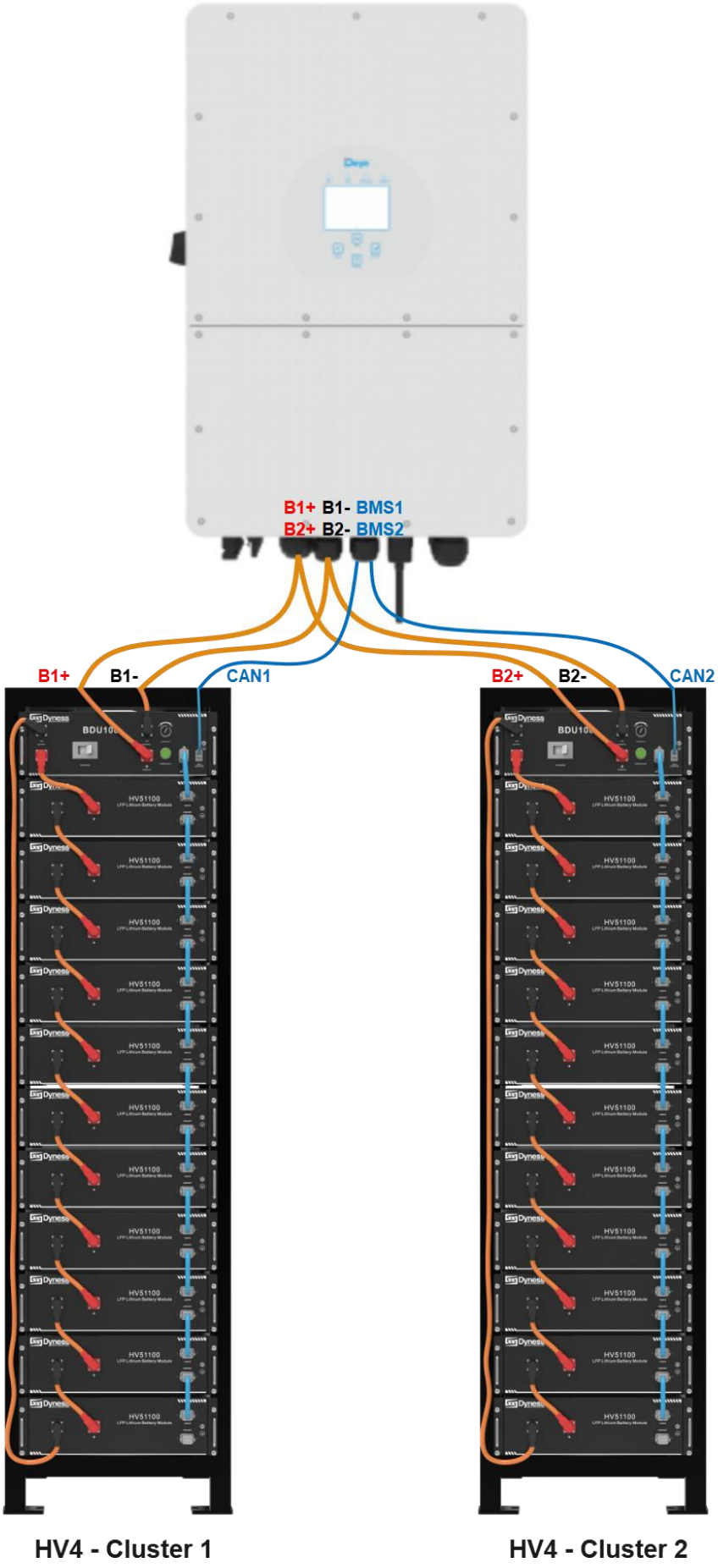


It is recommended to install a circuit breaker between HV4 and Deye

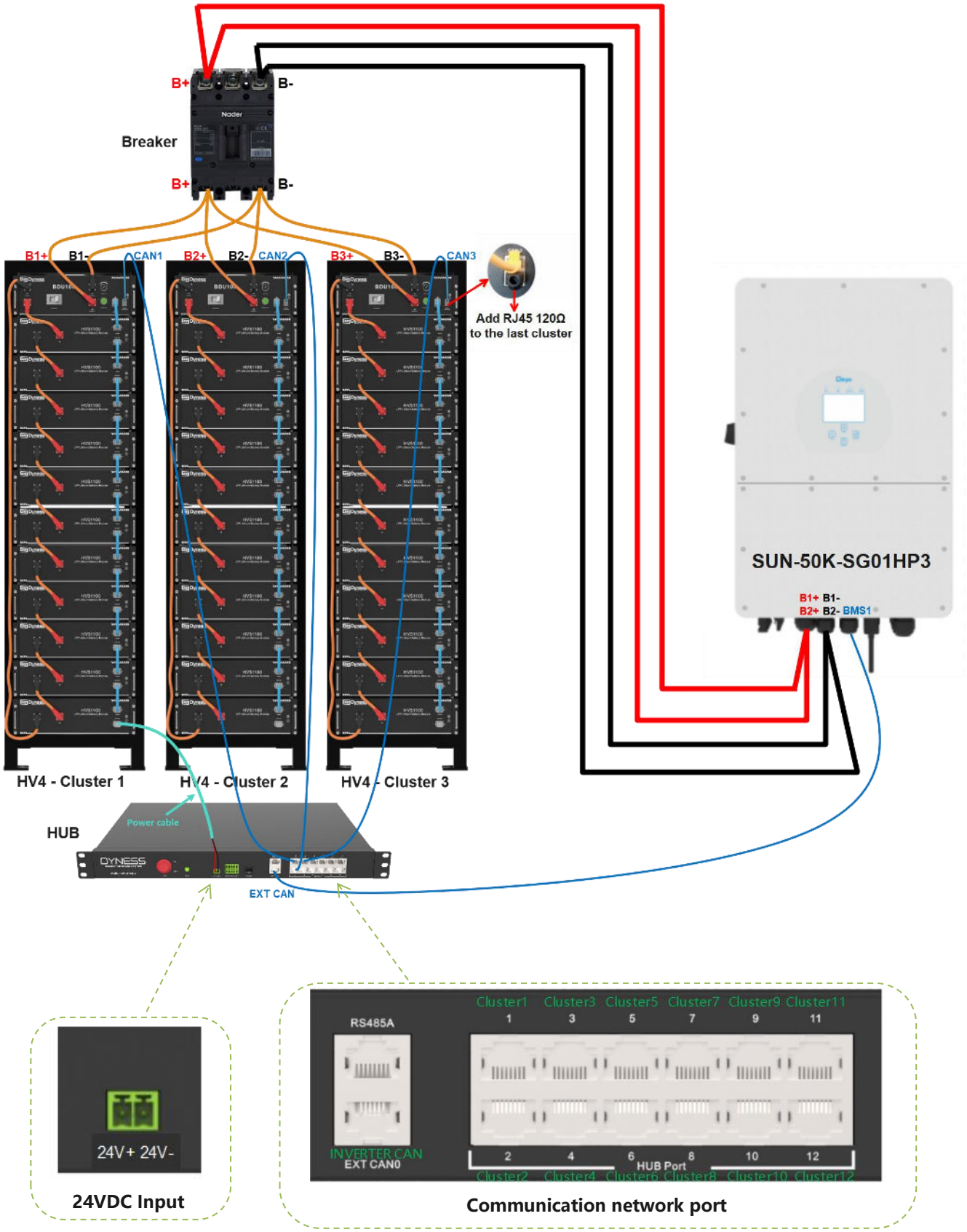


HV4 and Deye connection diagram

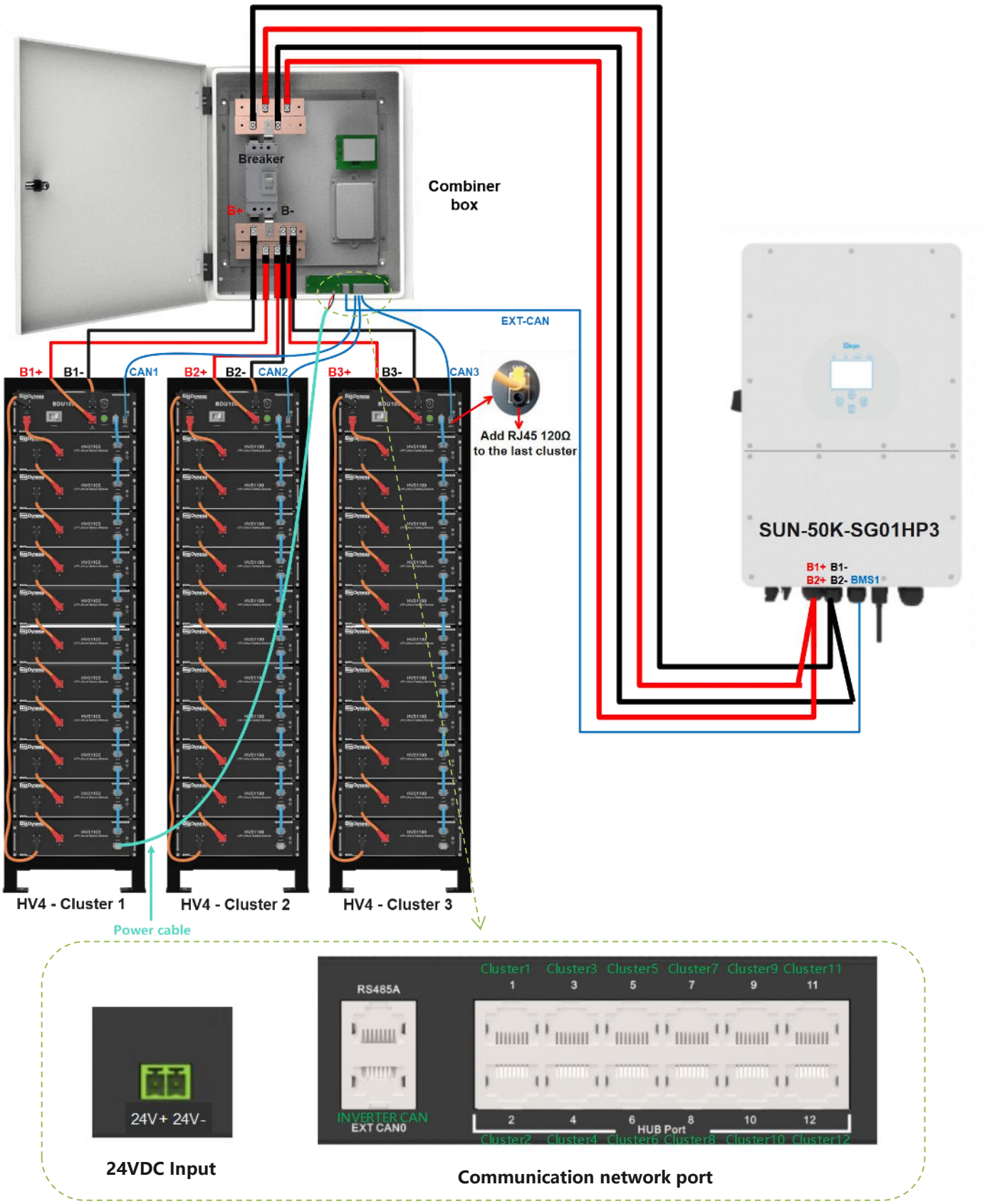
5 Connection diagram for using 2 clusters of HV4 batteries with DEYE SUN-50K-SG01HP3



Connection diagram of 3 clusters of HV4 batteries using HUB with DEYE SUN-50K-SG01HP3

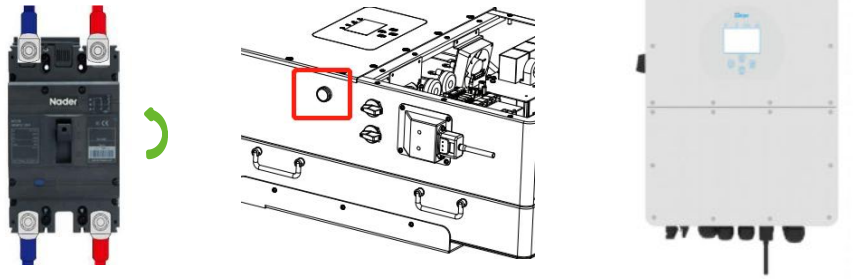


Connection diagram of 3 clusters of HV4 batteries using combiner box with DEYE SUN-50K-SG01HP3



6 Inverter and battery startup

Inverter startup: Turn on the mains circuit breaker and press the "ON/OFF" button on the left side of Deye. Turn on the DC switch to “I” position.

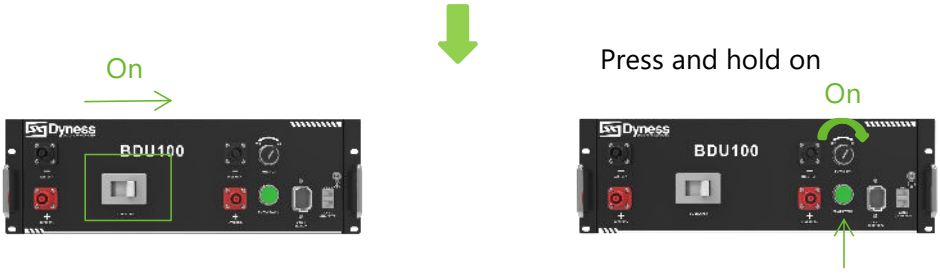


Battery startup:

1 cluster HV4 usage：Turn on the circuit breaker on HV4 BDU100, turn on the power switch, and press hold the 'wake up' button for 10 seconds.

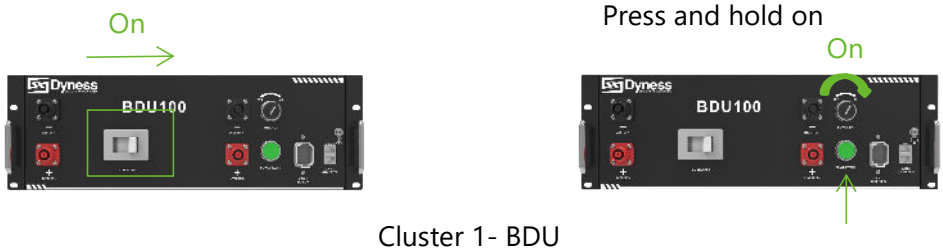
2 clusters HV4 usage：Turn on the circuit breaker on HV4 BDU100, turn on the power switch, and press hold the 'wake up' button for 10 seconds. Next, turn on the second cluster of batteries in order.

Cluster 1- BDU

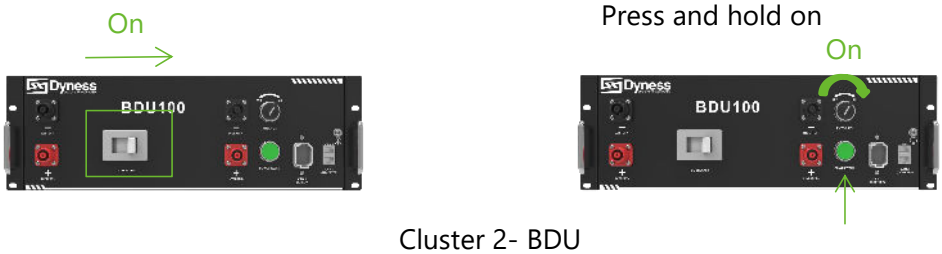


Cluster 2- BDU

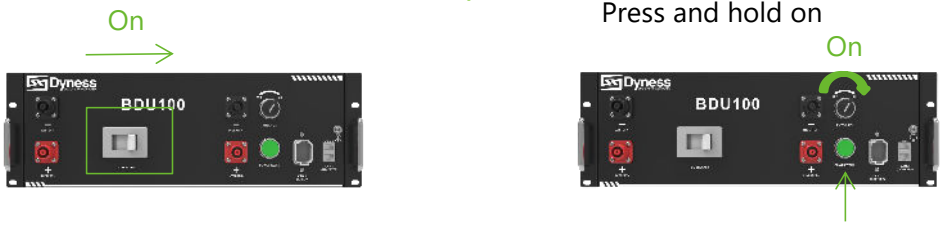
3 clusters HV4 and HUB usage：Turn on the circuit breaker on HV4 BDU100, turn on the power switch, and press hold the 'wake up' button for 10 seconds. Next, turn on the second and third battery clusters in order.



Cluster 1- BDU



Cluster 2- BDU

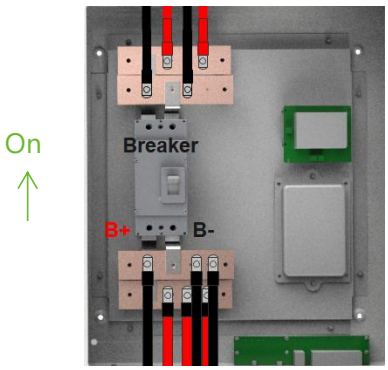


Cluster 3- BDU

Turn on the red switch of HUB-12P-HV to the "ON" position, the LED will light up.

HUB-12P-HV

3 clusters HV4 and combiner box usage: Turn on the breaker of the combiner box .



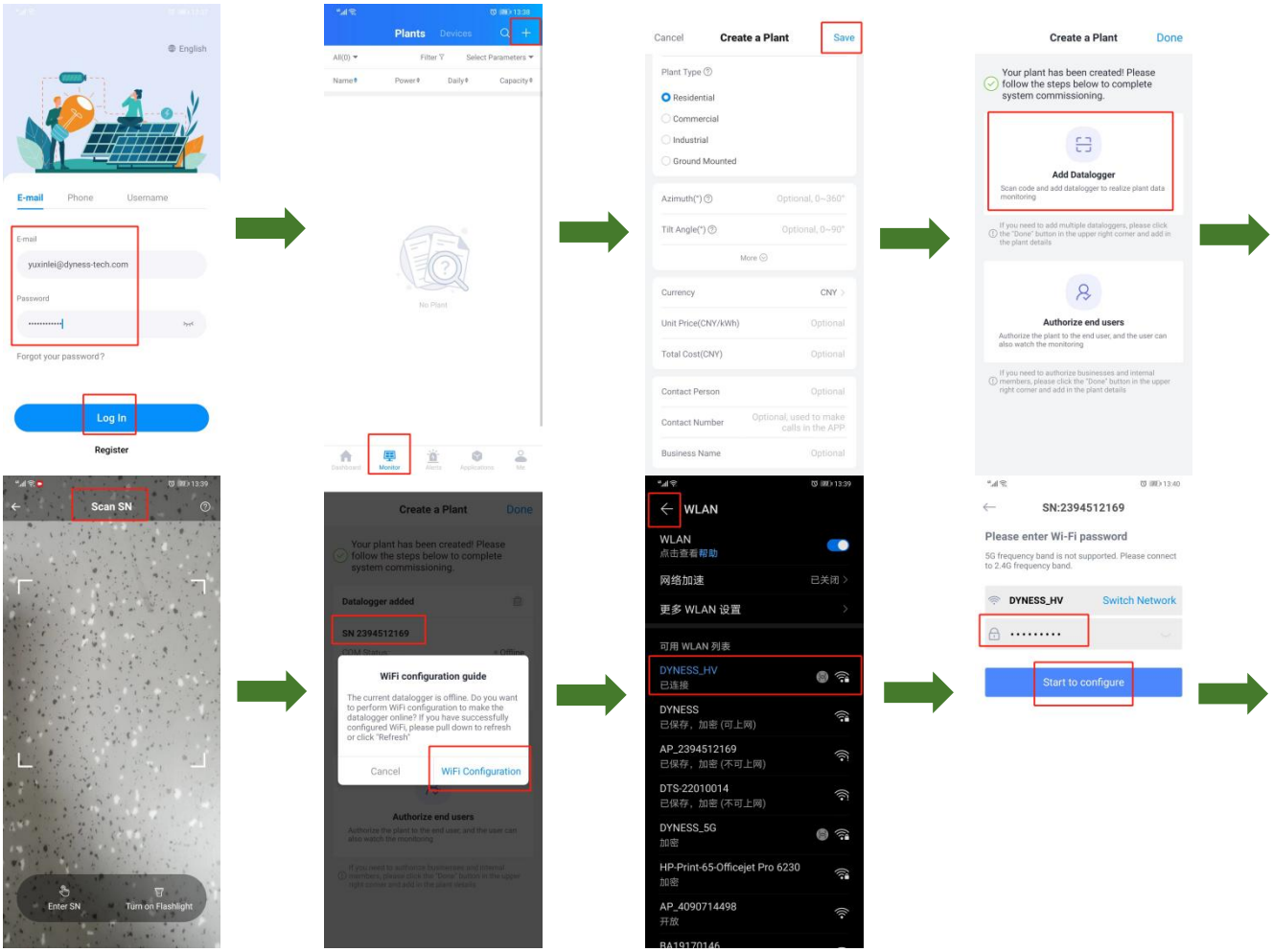
Turn on the circuit breaker on HV4 BDU100, turn on the power switch, and press hold the 'wake up' button for 10 seconds. Next, turn on the second and third battery clusters in order.

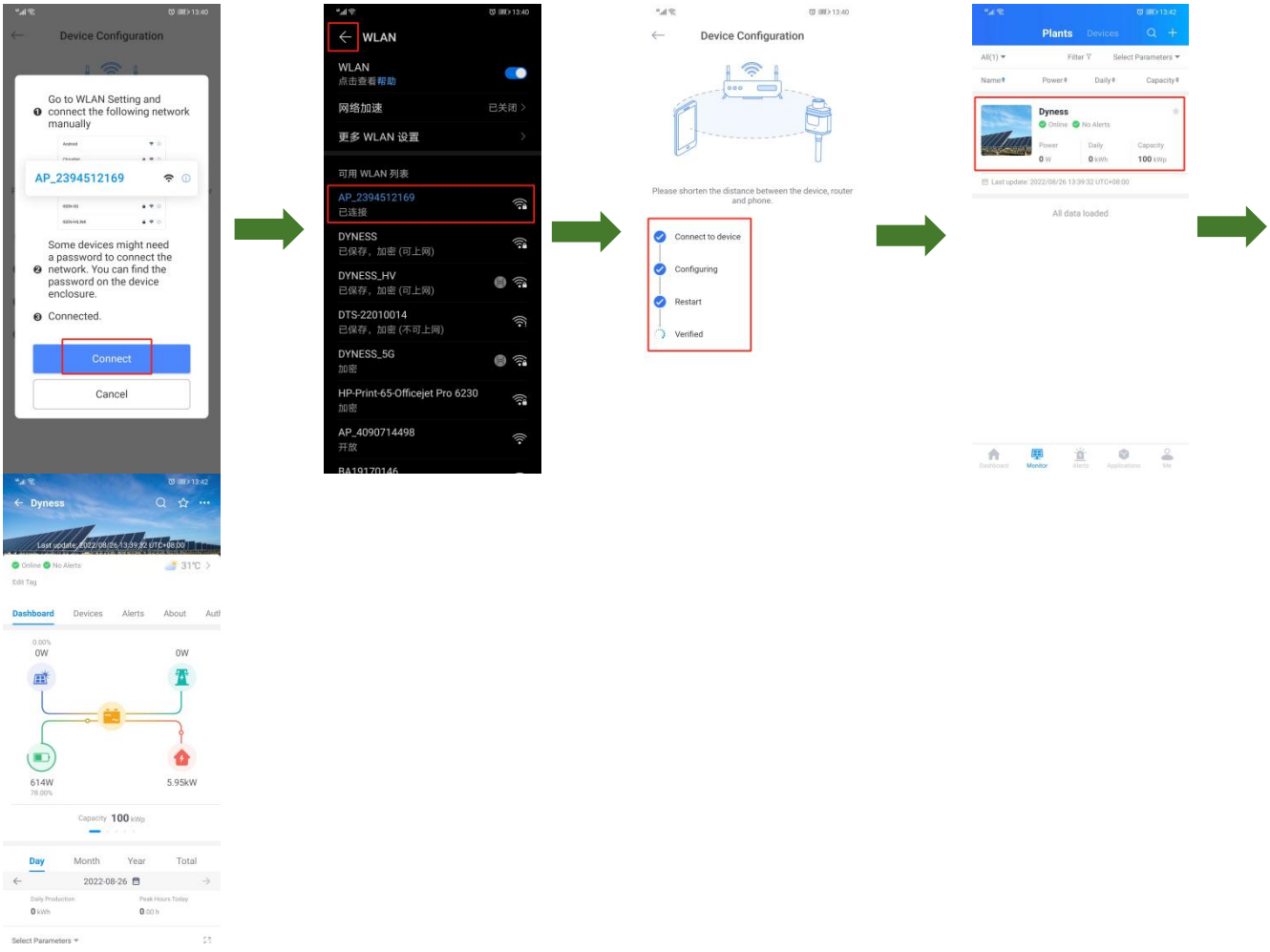
Cluster 1- BDU

Cluster 2- BDU

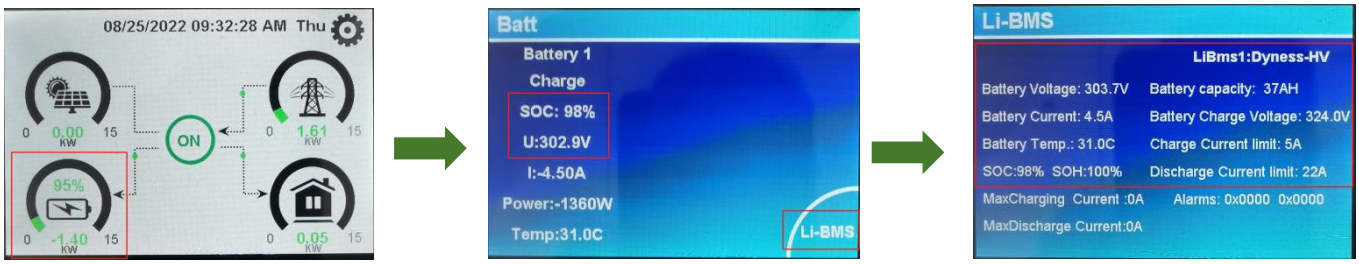
Cluster 3- BDU

6 After the inverter is powered on, log in to the app "SOLARMEN" to configure the inverter. The detailed operation steps are as follows:

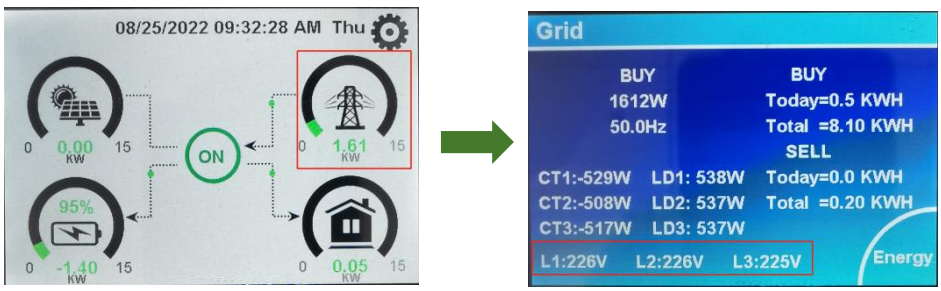




7 After the inverter network configuration is completed, the battery information can be viewed on the LCD touch screen. The detailed operation steps are as follows:

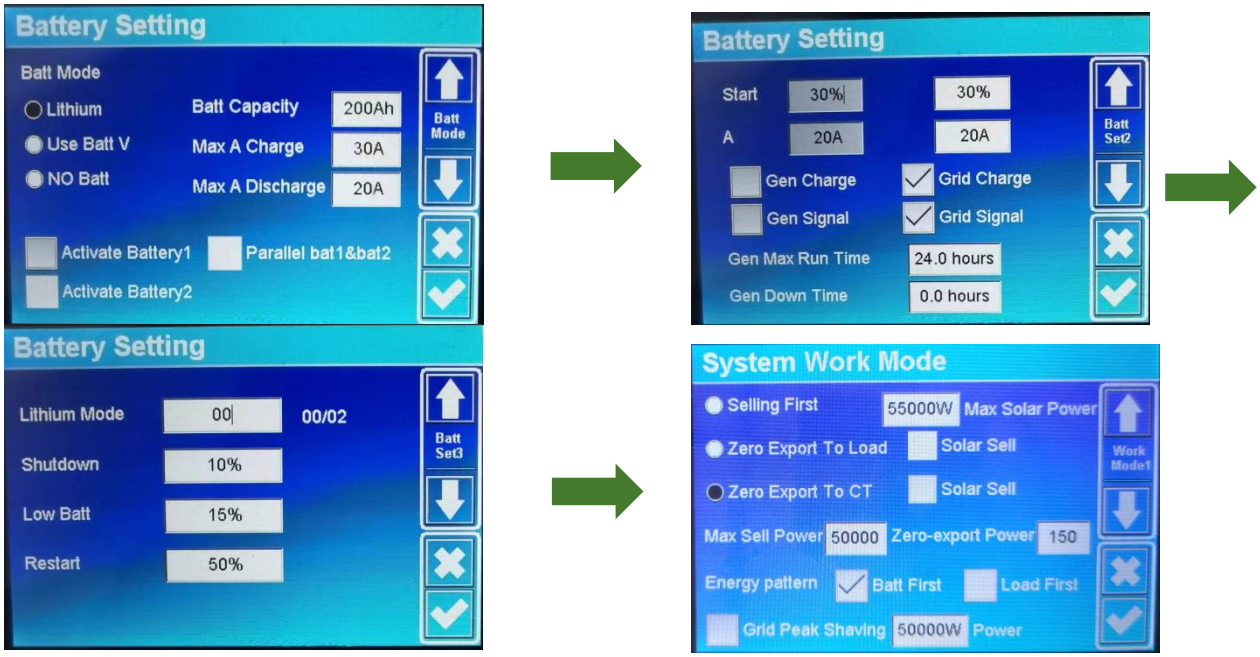


8 After the communication between the battery and the inverter is normal, turn on the mains air switch and check the grid information. The detailed operation steps are as follows:

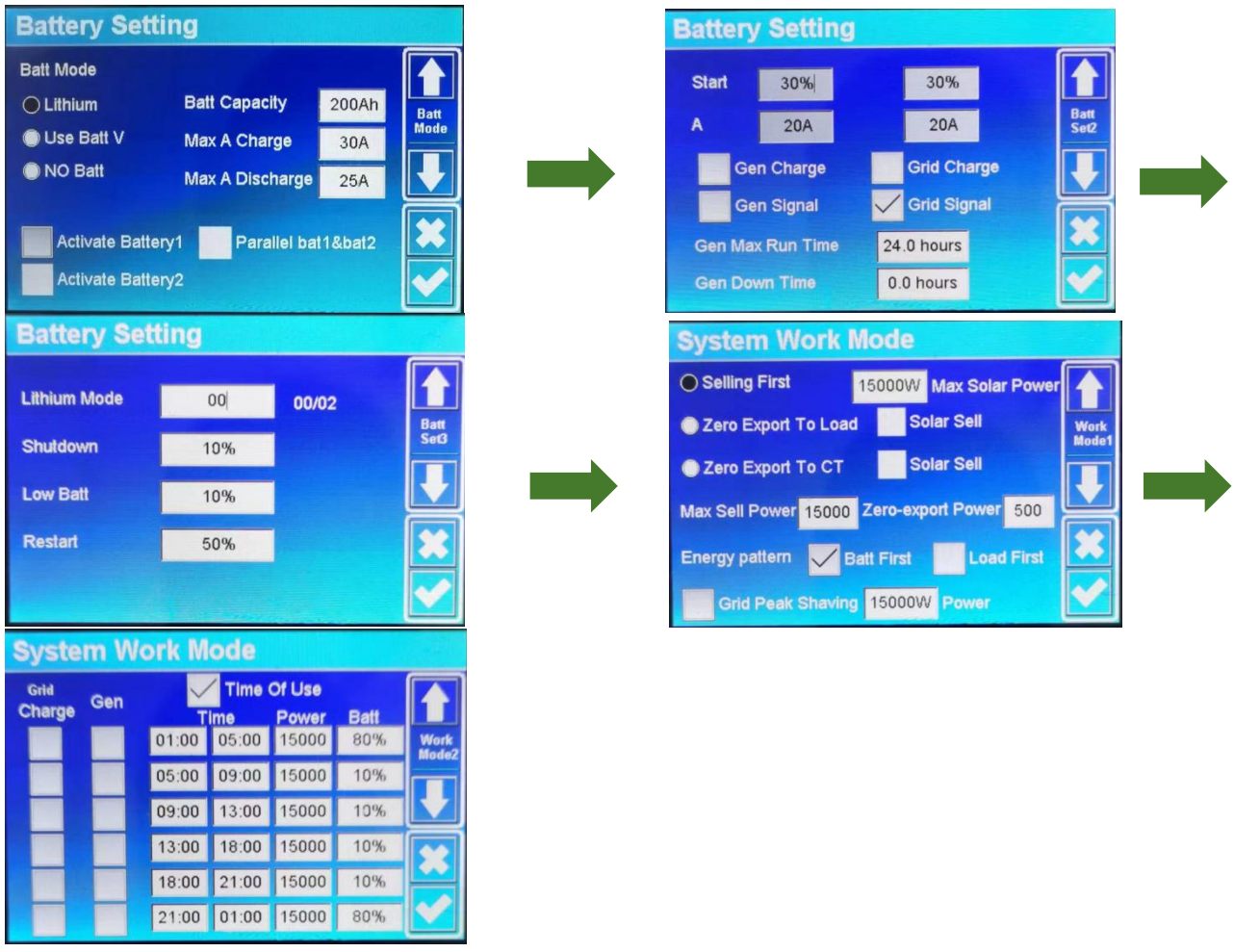


9 In the inverter setting interface, set the parameters in "Battery Setting" and "System Work Mode" respectively, and execute charging and discharging commands. The detailed operation steps are as follows:

Charging settings:



Discharge settings:



10 Off-Grid Mode Settings:
When the inverter is disconnected from the grid, it automatically enters the off-grid mode, and it can discharge when connected to the load.

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