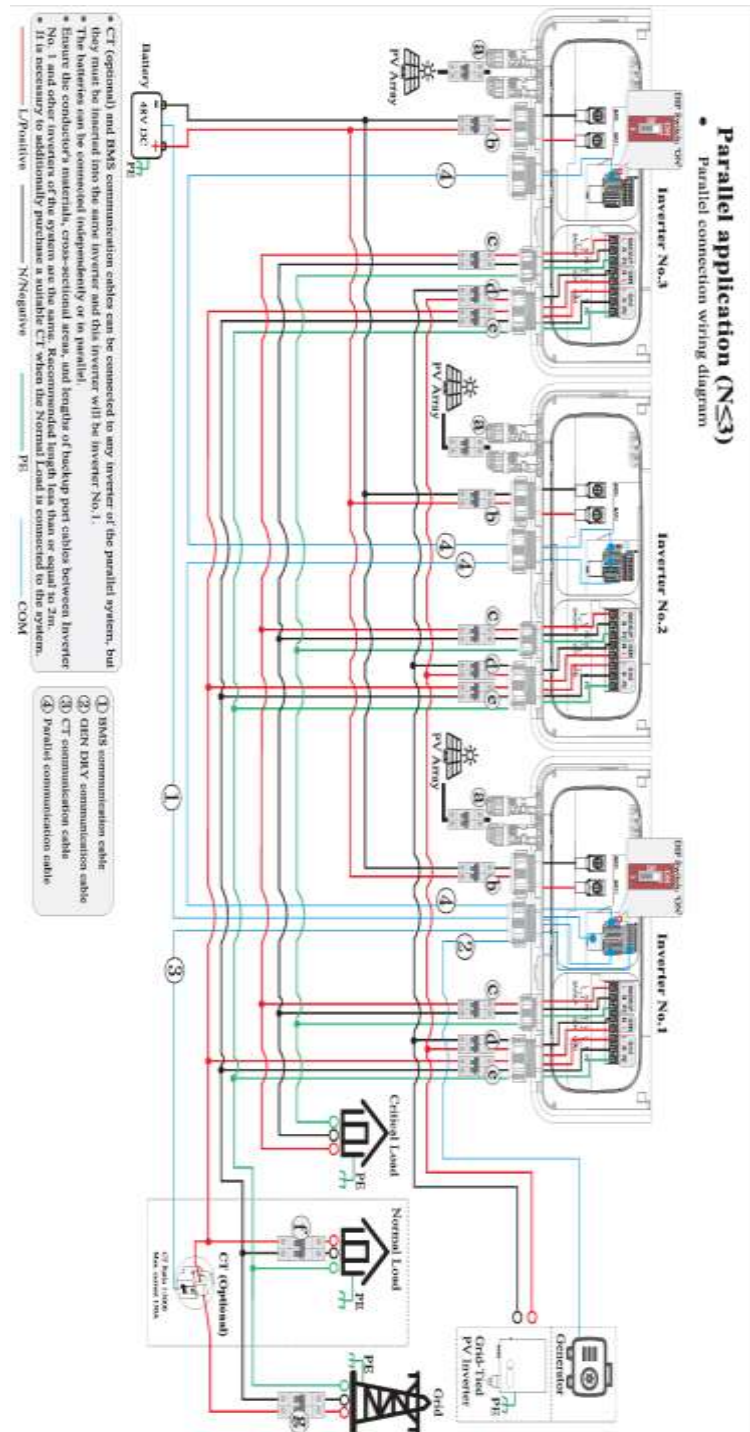


Hybrid ECO Parallel SOP

The Hybrid ECO inverter features a multi-unit parallel operation function.

The following is the specific operation guide for the parallel function.

Parallel System wiring (Battery parallel for example)



Two ways of battery connect

Notes: simple diagram for theory description

[illegible]

1. Disassembly & Wiring

- 1) Remove the front bottom panel and corresponding wiring terminals of the inverters to be paralleled, show as follow picture 1



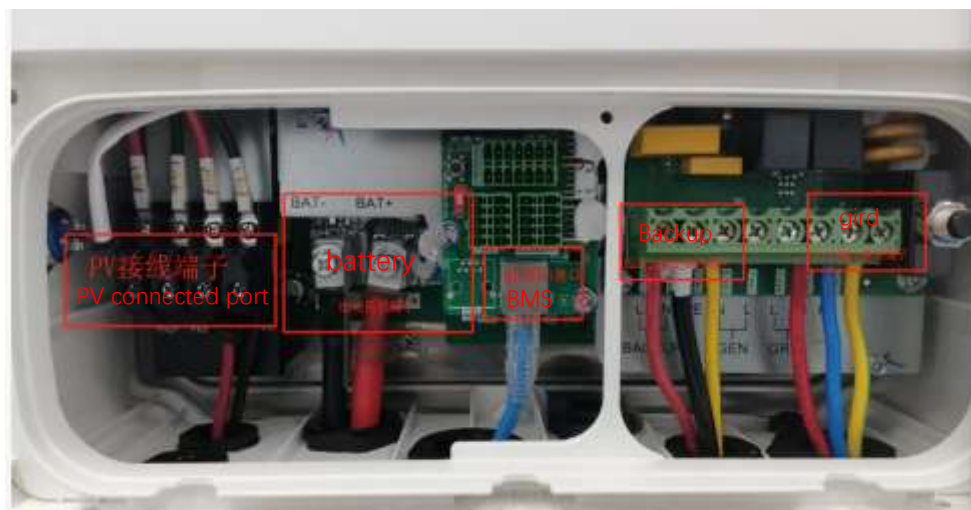
- 2) When removing the cover in Picture 1, note there is 1 screw on each left/right side and 3 screws at the bottom, total 5 screws.



- 3) After removing all screws, hold the grooves on both sides of the cover and pull it off. Loosen the terminal nuts and remove the hole plugs marked in the red box.



- 4) Proceed with single unit power wiring as shown in the diagram.



NOTE:

- (1) Grid input for parallel units must be from the same source.
- (2) Backup outputs must be connected together for shared loading; do not carry loads separately.
- (3) Before power on and single unit commissioning, check that firmware versions are exactly same. If not, upgrade to the same firmware, and restore factory settings to align parameters.

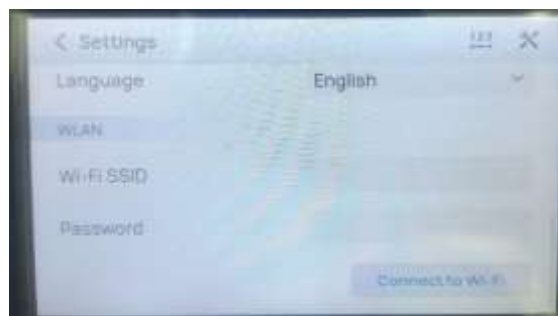
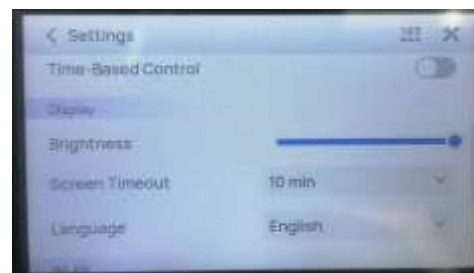
2. Parallel setting (Two Methods)

Method 1: Quick Setting via LCD

- 1) After power on initialization, check for alarms at Arrow 1. Clear alarms/faults first; replace the unit if faults persist. If no alarms, press the gear icon (Arrow 2) to enter Settings.



- 2) Basic parameters can be set without password on this page.



- 3) click the "123" icon in the upper right corner to enter Quick Setting; enter password: admin.

Step ①—②: Enter password **admin**

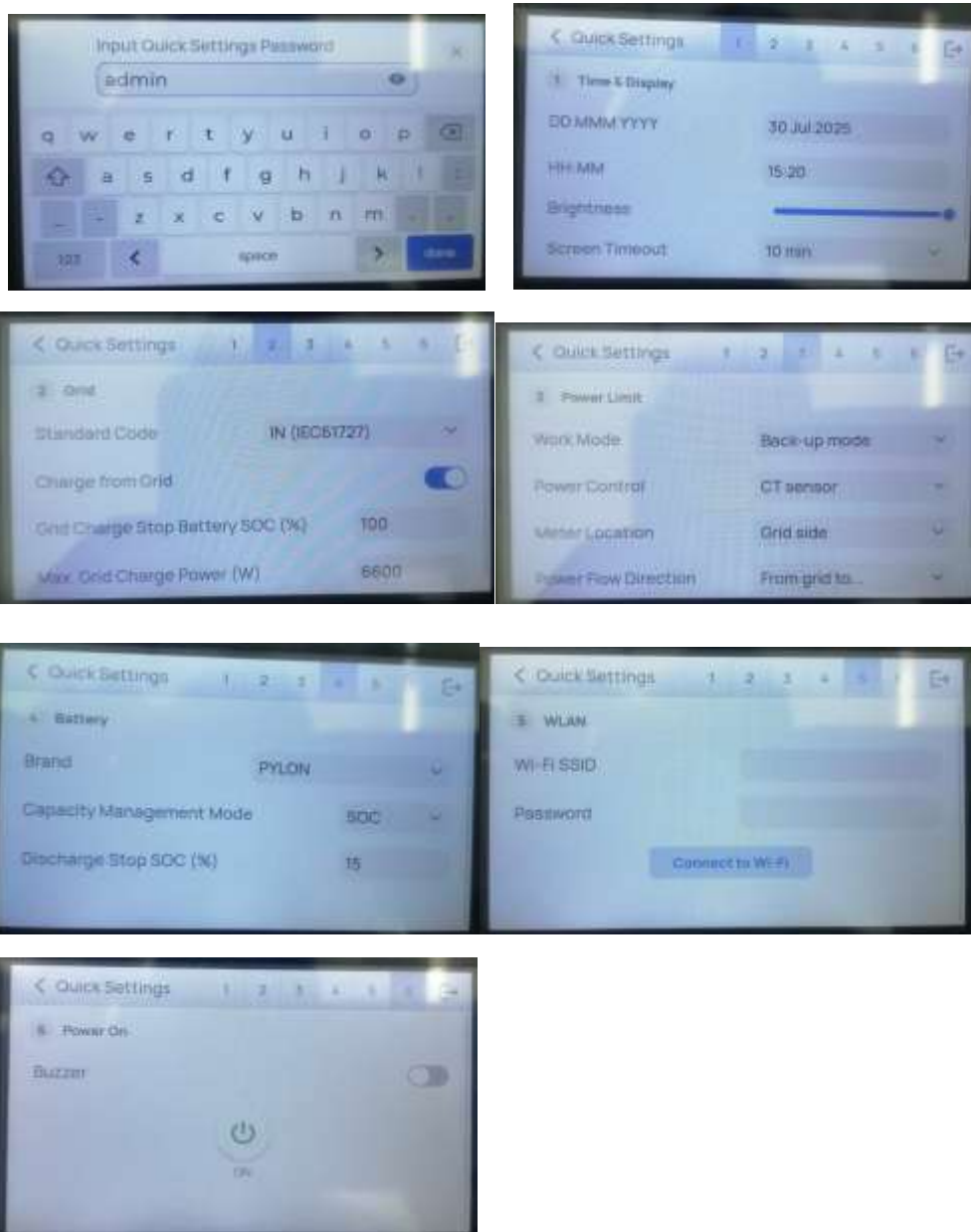
Step ③: Time & Display settings

Step ④: Grid parameters (Standard Code: IEC61727)

Step ⑤: Power Limit & Work Mode (Backup mode)

Step ⑥—⑦: WLAN settings

Step ⑧: Power On & Buzzer



- 4) After completing steps ③–⑧, perform a single unit power on test and verify operation.

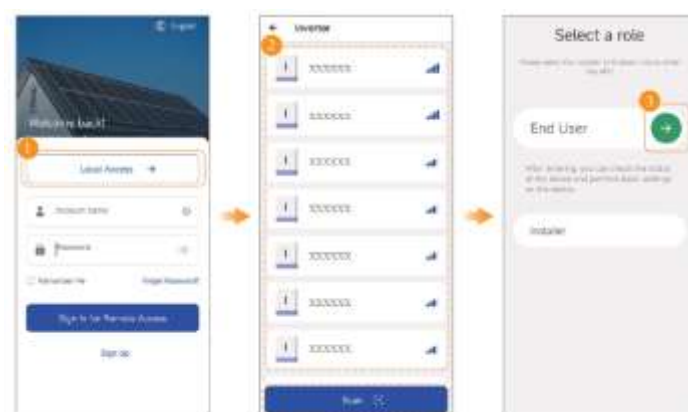
Note:

The setting options in steps ③ to ⑧ under Quick Setting shall be configured according to the actual installation conditions and requirements.

In addition, all parameters must be set identically on every unit in the parallel system.

Method 2: Quick Setting via Mobile APP (solarvolt)

- 1) connect to Bluetooth by solarvolt



2) quick settings

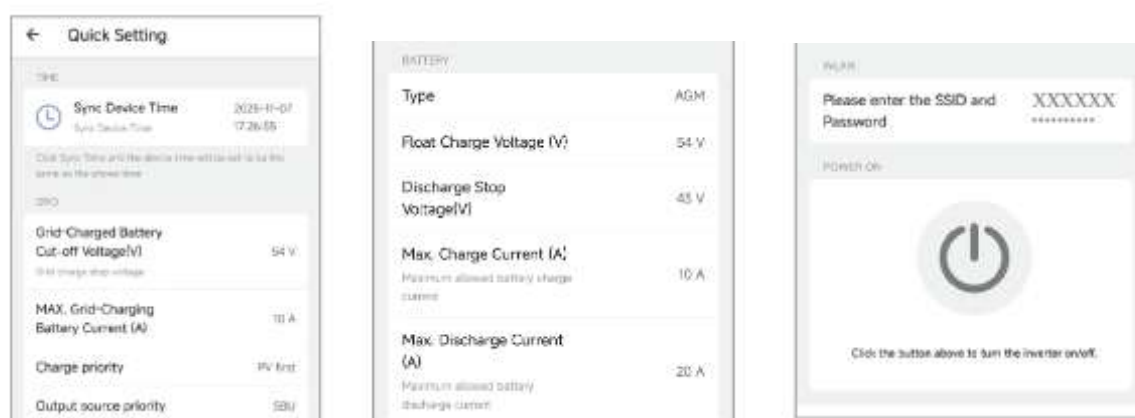
Step 1: Wi Fi configuration (2.4G only; no special characters/Chinese/spaces in SSID/password)

Step 2: Grid parameters (Voltage: 230V, Frequency: 50Hz)

Step 3: Power limit settings

Step 4: Working mode (Self consumption mode)

Step 5: Turn on/off the inverter



Note:

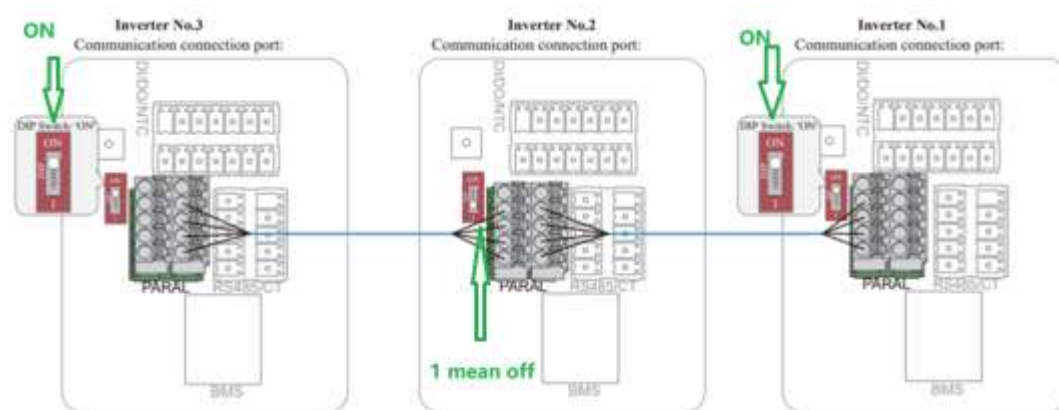
- 1、 The settings under Quick Setting above shall be configured based on actual configuration and requirements.
- 2、 Ensure all units to be operated in parallel have same settings.
- 3、 In step 1, if using a WiFi connection, the WiFi name and password may only consist of numbers, letters, or combinations. Special characters, Chinese characters, and leading or trailing spaces are strictly prohibited.
- 4、 Otherwise, the APP may detect the WiFi name but will fail to accept the password and display an error message.

3. Parallel Wiring & Settings

- 1) Parallel Wiring. Locate the parallel terminals marked by red arrows.



- (1) Pls Use a **shielded 4-core signal cable** as the parallel communication cable.
- (2) Connect pins of the PARAL terminal on the first unit to the PARAL terminal on the second or N unit.
- (3) as shown in the diagram below



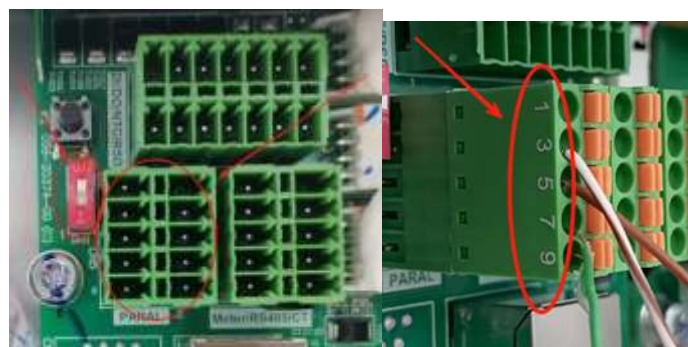
Note:

DIP Switch Note

Special attention should be paid to the red DIP switches in the left picture below.

Set the red DIP switch to **ON** for the **first and last units**; leave others **OFF** (1 position means off).

This match resistors will ensure good parameter synchronization.



- 2) Enable the parallel operation settings via the machine panel, and configure the relevant parallel parameters as shown in the following pictures.



Note:

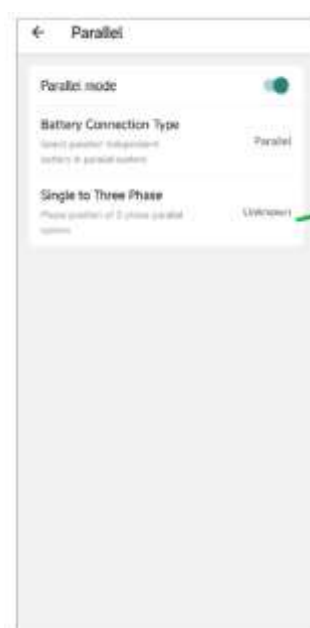
(1) It is necessary to ensure that all the settings of the inverters and firmware of the inverters that need to be connected in parallel are consistent.

(2) Before enabling the parallel operation, it is necessary to turn off all the inverters first, and then enable the parallel operation.

3) For the steps to search for the unit via Bluetooth and log in to the APP, please refer to the previous instructions.

After entering the APP, follow the steps below for configuration

Bluetooth- setting- inverter-parallel



This is for single phase form 3 phase, if parallel on same phase, set as unknown or single, not set as L1/L2/L3

Note:

(1) It is necessary to ensure that all the settings of the inverters and firmware of the inverters that need to be connected in parallel are consistent.

(2) Before enabling the parallel operation, it is necessary to turn off all the inverters first, and then enable the parallel operation.

Parallel Startup

- 1、 After all parallel parameters are set, you can start the units via the LCD panel or mobile APP.
- 2、 Operate one unit and both units will start at the same time.
- 3、 If both units power on at the same time, this indicates successful parallel operation.
- 4、 If startup proceeds normally, the display will appear as shown in the physical diagram below:)



- 1、 The inverter  remains illuminated, and **P2** will be displayed at the top of the LCD.
- 2、 The number **2** in P2 indicates that **2 units are operating in parallel**; the displayed number corresponds to the total number of parallel-connected units.
- 3、 The power on/off button for the unit is located at the bottom of the LCD

Important Note:

- 1、 In parallel operation, modifying parameters on one unit will apply the changes to both units simultaneously.
- 2、 If the system is set to parallel mode but the parallel communication cable is not connected, changing parameters on one unit will not affect the other.
- 3、 Furthermore, even if the parallel cable is connected afterward, the parameters will not synchronize automatically. Since parallel units have no master-slave distinction, they cannot synchronize data with each other on their own.
- 4、 Therefore, when modifying parallel parameters, always ensure the parallel cable is properly connected in advance.