

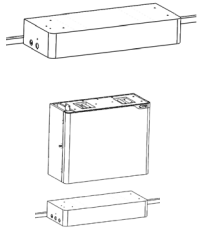
CYG

All-in-One Residential Energy Storage System

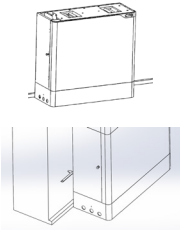
Powermate A3.68/A4.6/A5/A6

1 Installation

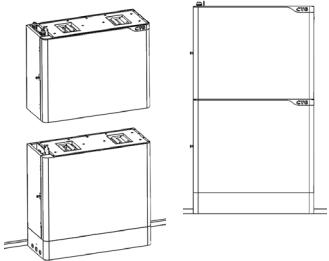
1. Place the base against the wall and keep the base is aclinic. Place the first battery pack on top of the base. The four positioning holes at the bottom of the first battery pack should be aligned with the positioning pins, as shown below:



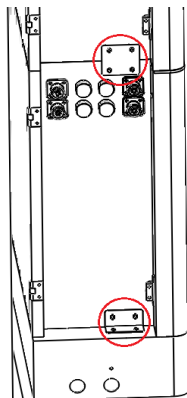
2. Move the pack to keep the distance between the back of the pack and the wall is 38mm. You can use the tools we provide for measurement, as shown below:



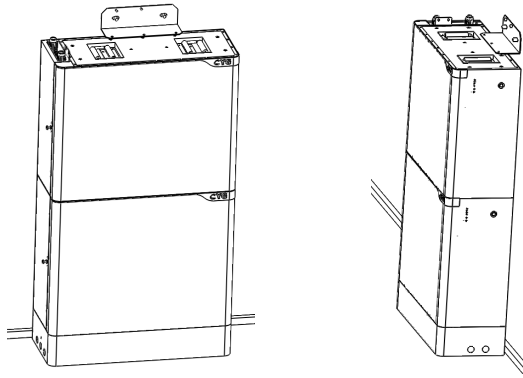
3. Install 4 pins on the upper cover of the first pack as shown in the figure below. The four positioning holes at the bottom of the second battery pack should be aligned with the positioning pins:



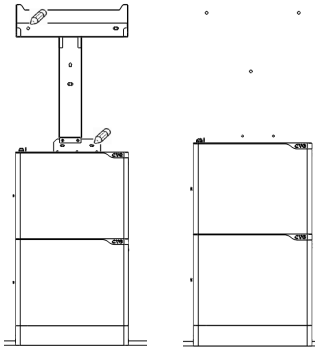
4. Connect the first battery to the second battery and the battery to the base with a I-shaped bracket and a L-shaped bracket.



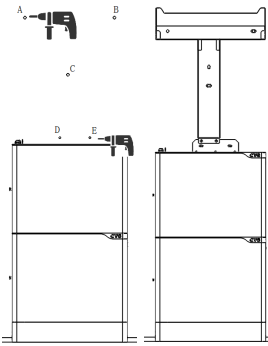
5. Install the L-shaped bracket and keep the bracket attach to the wall, as shown below:



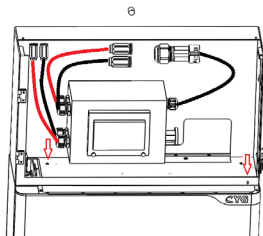
6. Install the T-shaped bracket, mark the following five holes that we will drill with a marker and then remove the T & L shaped brackets.



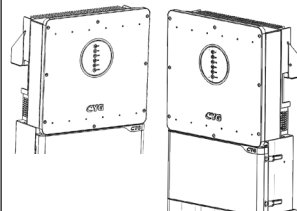
7. Use a 14φ drill bit to drill the hole A, B and C. Use a 12φ drill bit to drill the hole D and E. Install the 5 expansion screws of the T & L shaped bracket.



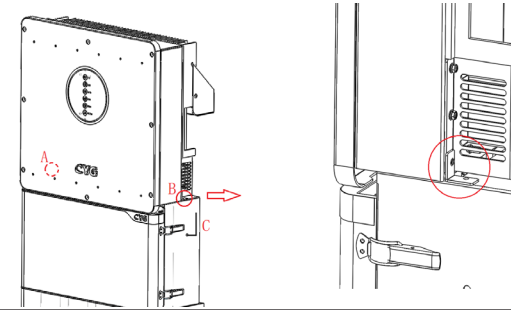
8. Install the system box and lock the system box to the pack with 4 pieces of M5×10 screws, as shown in the figure below:



9. Install the inverter according to the method shown in the figure below. Keep the front panel of the inverter flush with the system box below.



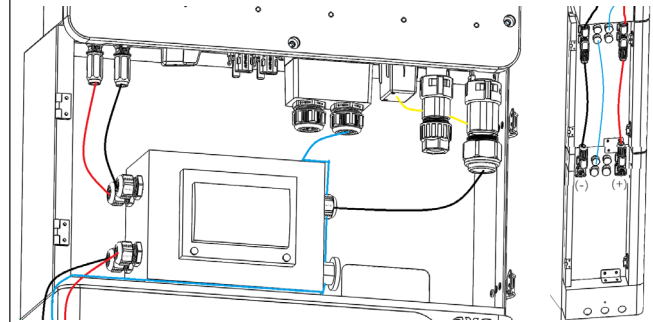
10. Connect and fix the L-shaped brackets at position A and B of the inverter to the system box. Install the WIFI antenna. As shown below:



2 Electrical Connection

Battery/BMS/GRID/WIFI Connection

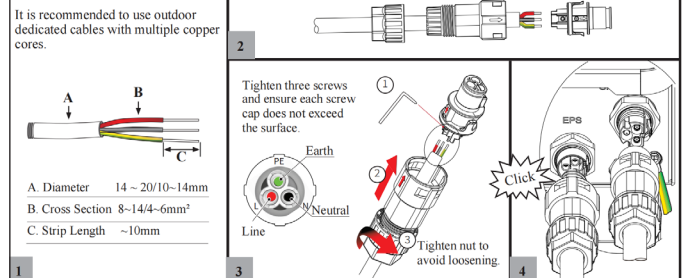
Connect the terminals that come with the system box:



Grid/EPS Connection

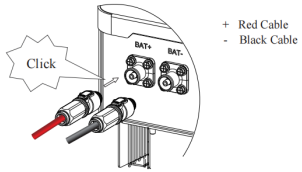
Before connecting the GRID/EPS terminal, ensure that both the AC terminal and the DC terminal are powered off and the PV switch is OFF. Otherwise there is a risk of high voltage shock.

It is recommended to use outdoor dedicated cables with multiple copper cores.

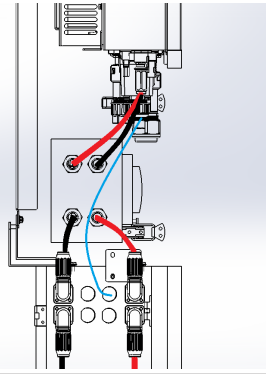


Battery Connection

- The 2 wires in the upper part of the cable box are connected to the inverter, the red wire is connected to the (+) terminal, and the black wire is connected to the (-) terminal.
- The two wires in the lower part of the box are connected to the battery, the red wire is connected to the (+) terminal, and the black wire is connected to the (-) terminal.

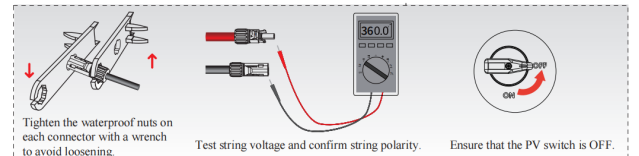
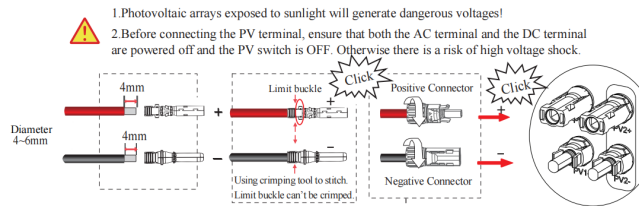


Warning!
Polarity reverse will damage the inverter!



PV Connection (N/A for AC Couple Inverter)

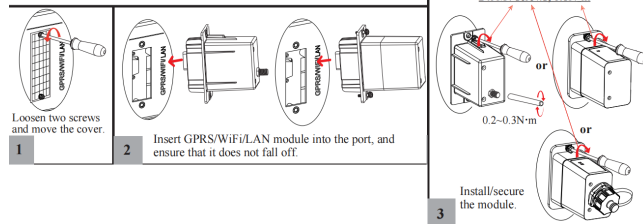
3. For the PV connection please refer to below.



Note: DC cable should be dedicated PV cable (suggest using 4-6mm² PV1-F cable).

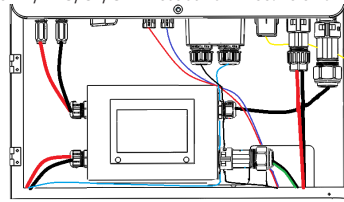
GPRS/WIFI/LAN Module Installation (Optional)

For details, please refer to the corresponding Module Installation Guide in the packing. The appearance of modules may be slightly different. The figure shown here is only for illustration.

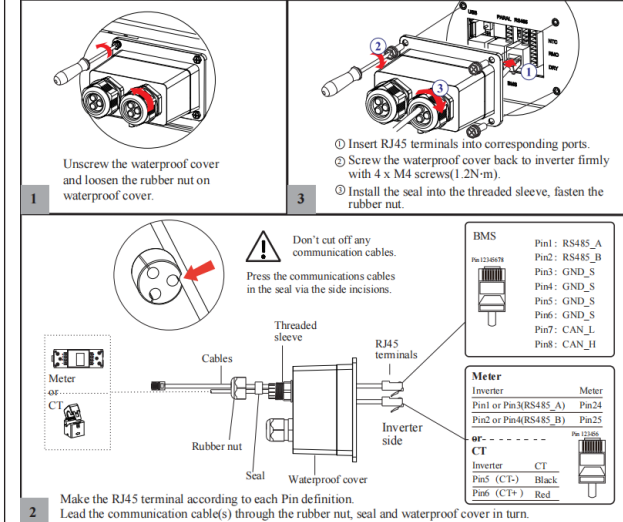


Connect the rest of the wires

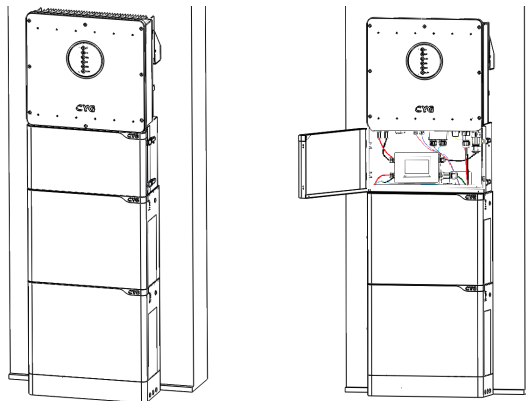
4. Connect the PV/EPS/CT/GRID electric wires. As shown below:



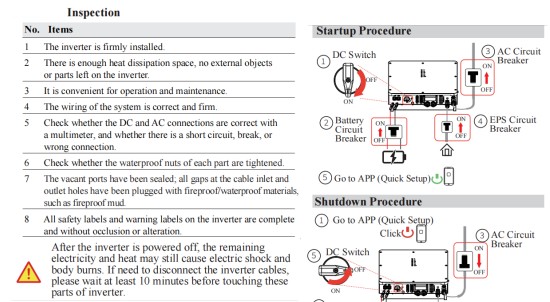
Communication Cable(s) Connection (CT/Meter and BMS)



The All-in-one Inverter after installation and connection is shown in the following figures:



Startup/Shutdown Procedure



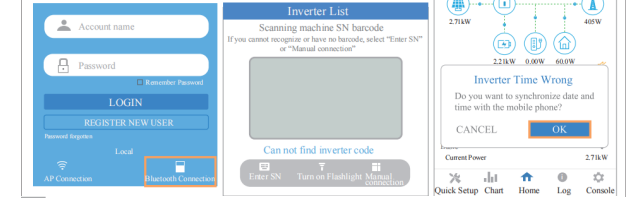
Quick Setup

A Preparation

- Download the APP.
 - Scan the QR code on the inverter to download the APP.
 - Download the APP from the App Store or Google Play.
- Power on the inverter.

B Connecting the Inverter

- Open the Bluetooth on your own phone, then open the APP.
- Then follow the instructions below.



C Quick Setup



Display

LED	Status	Description	LED	Status	Description
PV	On	PV input is normal.	COM	Blink	Data are communicating.
	Blink	PV input is abnormal.		Off	No data transmission.
	Off	PV is unavailable.		EPS	On
BAT	On	Battery is charging.	Blink		EPS output is abnormal.
	Blink	Battery is discharging.	Off		EPS power is unavailable.
	Off	Battery is abnormal.	ALARM	On	Fault has occurred and inverter shuts down.
Off	Battery is unavailable.	Blink		Alarms has occurred but inverter doesn't shut down.	
GRID	On	GRID is available and normal.		Off	No fault.
	Blink	GRID is available and abnormal.			
	Off	GRID is unavailable.			

Cloud setting

When using the WiFi or LAN module, you need a cloud account for inverter's networking monitoring. And bind the inverter to the cloud account. The inverter's operational data will be uploaded to the cloud account after it is grid-tied. You can skip the registration step when you have registered a cloud account before.

1. Register a cloud account

- Click Register New user.
- Click each item to enter the corresponding informations then click GET.
- You will receive the registration mail. Enter the verification code from the mail. Then click REGISTER to activate your account and finish the registration process.

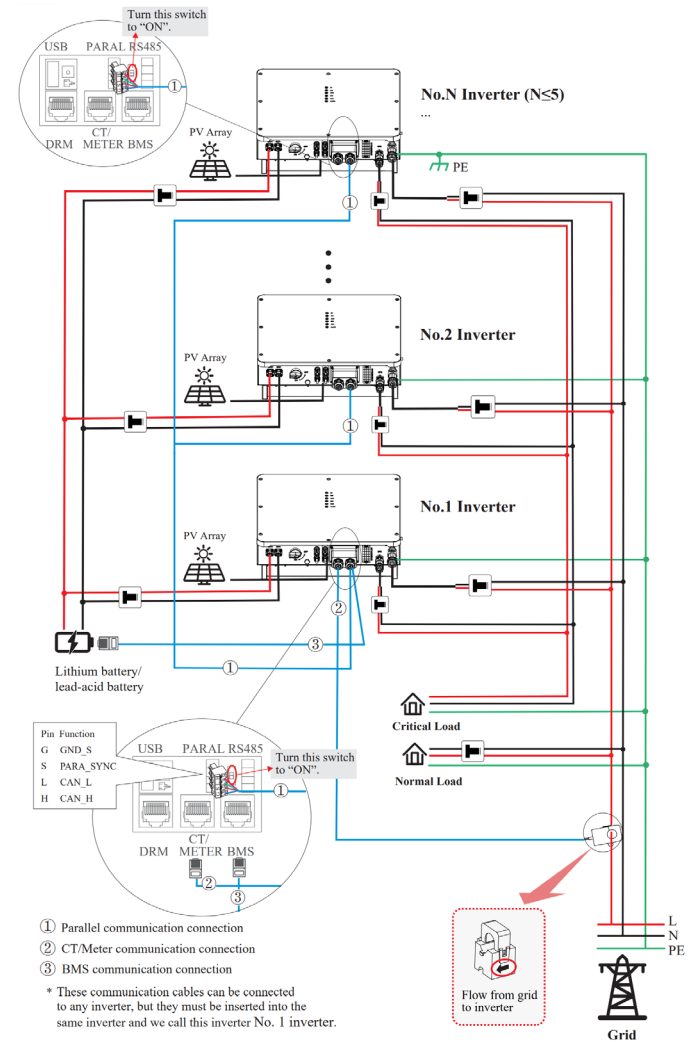
2. Add inverter to cloud account

- Login App with your cloud account. Click "+" and select a PlantType to add the power station.
- Enter power station information then click CONFIRM.
- Select the power station you added, go to List page, and click "+" to scan the serial number barcode at the safety label on the machine to add inverter.

"XX" stands for APP name, and does not represent the length of the APP name.

Wiring System

Single phase parallel connection mode-Scheme (N ≤ 5)



- Parallel communication connection
- CT/Meter communication connection
- BMS communication connection

* These communication cables can be connected to any inverter, but they must be inserted into the same inverter and we call this inverter No. 1 inverter.

Note:

- PV related contents are N/A for AC Couple inverter.
- BMS communication connection is only for lithium battery.
- It is necessary to turn the matched resistance switch of No. 1 inverter and No. N inverter to "ON" in parallel connection mode.
- With parallel connection mode, it is necessary to connect APP to one of inverters and then go to [Console > Other Setting](#) page to enable [Parallel mode](#) on APP.

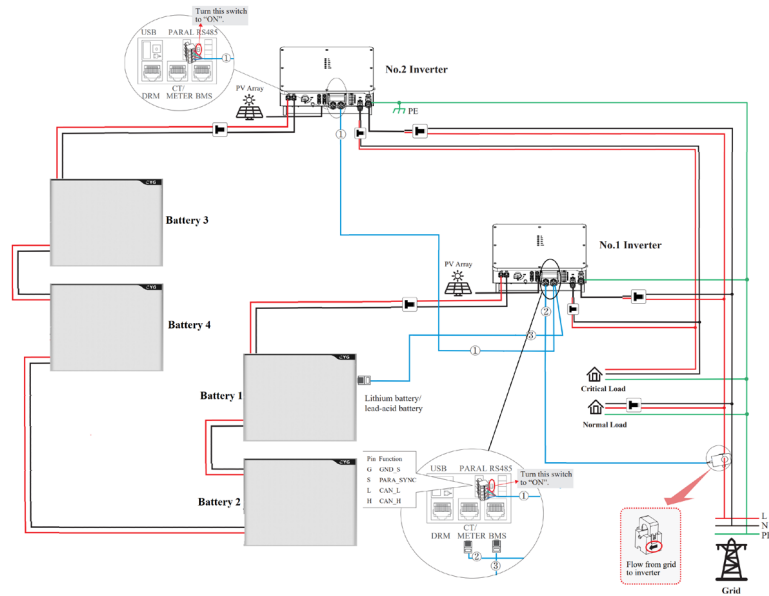


DANGER

Ensure that the inverter and all cables to be installed have been completely powered off during the whole process of installation and connection. Otherwise, fatal injury could be caused by the high voltage.

Wiring System

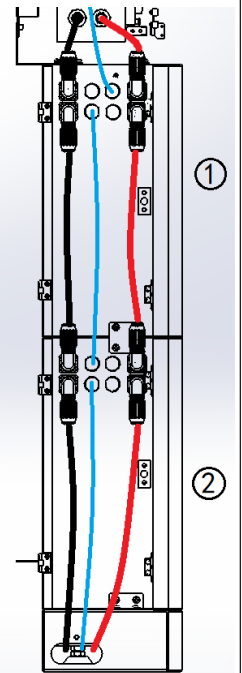
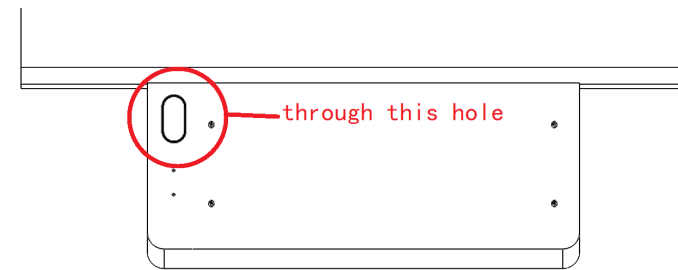
Single phase parallel connection mode-Scheme (N=2)



4. Connect the (+) terminal and (-) terminal of the upper No. 1 battery with the (+) terminal and (-) terminal of the lower No. 2 battery.

5. Connect the "link out" terminal the upper No. 1 battery to the "link in" terminal of the lower No. 2 battery with a network wire.

6. Thread the battery wire and bms wire through the hole in the base.



Wiring System

Single phase connection mode (Battery=4)

1. The 2 wires in the upper part of the cable box are connected to the inverter, the red wire is connected to the (+) terminal, and the black wire is connected to the (-) terminal.

2. The two wires in the lower part of the box are connected to the battery, the red wire is connected to the (+) terminal, and the black wire is connected to the (-) terminal.

3. Connect the BMS terminal of the inverter to the COM terminal of the battery

As Shown below:

