

Pytes Pi LV1 Installation and configuration manual with Sol-Ark



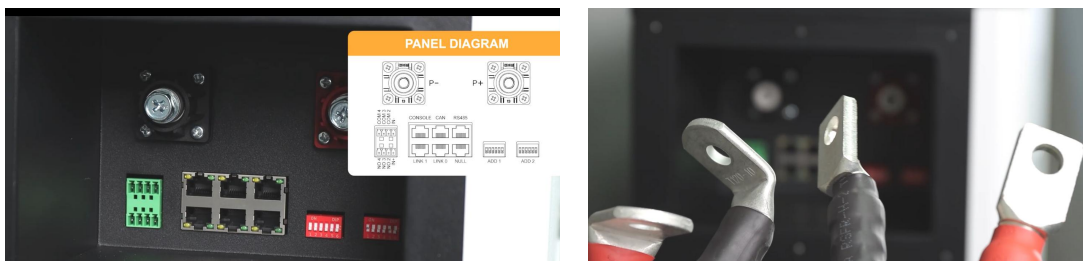
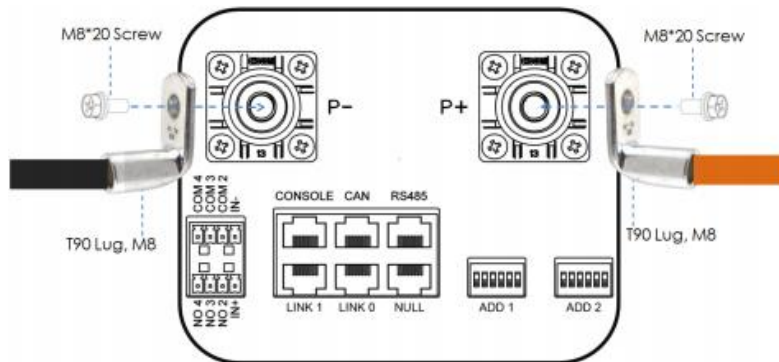
1. Install the battery

2. Cabling connection on Pi LV1

1. Loosening 6 screws from left side panel.



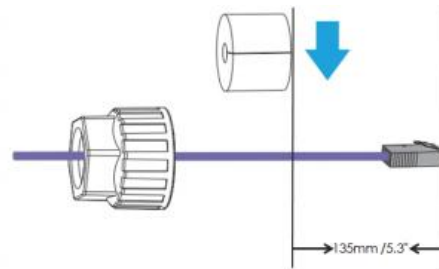
Align the T90 lug end of the external power cables to power terminals on Pi LV1 BCU, positive to positive and negative to negative, fix the lug to terminal with M8*20 screws.



Note:

Before connecting the power cable, connect and disconnect the cable to identify the positive and negative terminal, then make a mark respectively. After the cable is connected, measure whether there is short-circuit or reverse connection.

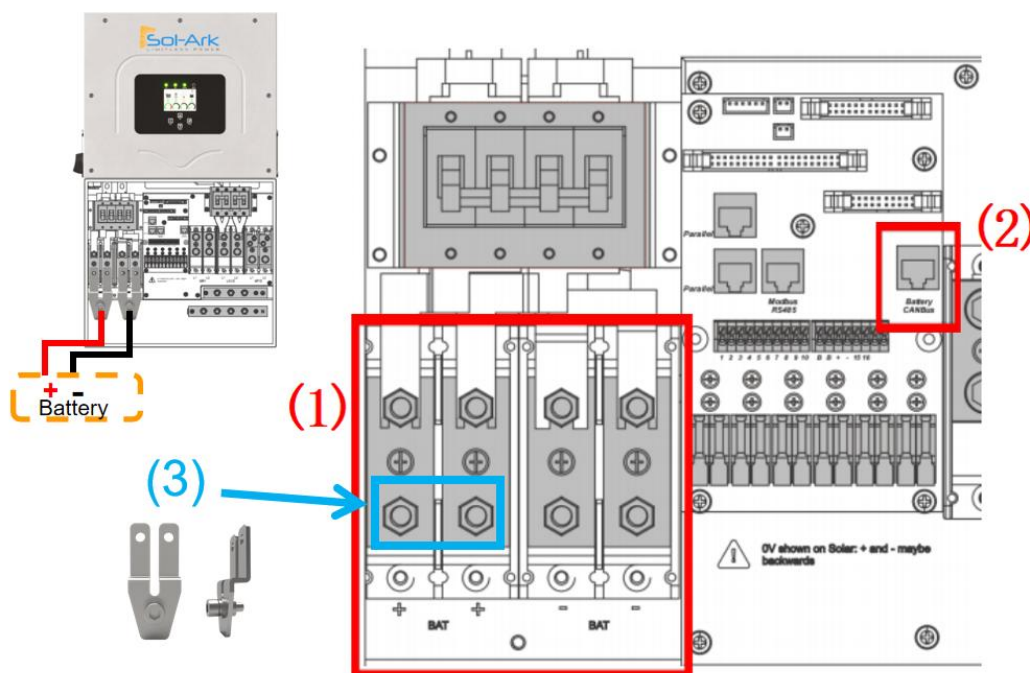
- Stick the EVA tape to external communication cable, 135mm/5.3" away from RJ45 connector end. Then to connect it to CAN/RS485 port.



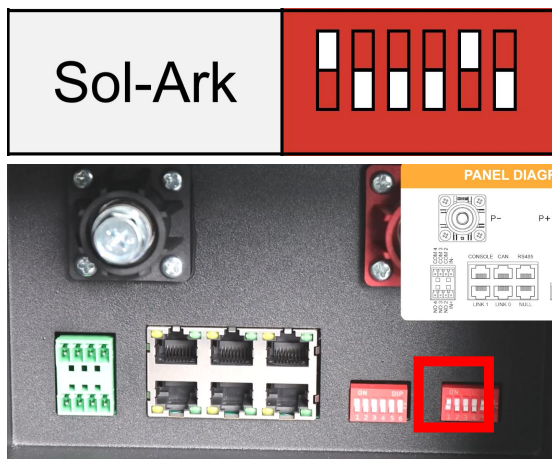
- Loosen the gland on side panel and thread the cables through gland holes of side panel. Install the side panel back to Pi LV1 BCU, together to tighten the glands.

Connect to inverter

- Connect the power cables between inverter and battery. The battery connector is (1) as shown below. (3) Busbar purchase from Pytes can be used to connect two positive or two negative poles.
- Plug in the battery end into the **CAN** port of the Pytes battery and plug in the inverter end into Sol-Ark Battery **CANBus** Port (2) as shown .



3. Set dip switch



4. Start battery and the inverter.

Start Procedure

Note: Before starting the system, strictly check the connection terminals to ensure that the terminal is firmly connected. Make sure Pi LV1 is powered on prior to turn on the inverter. This is to avoid battery shock by the in-rush current of the large capacitors of the inverter.

Step 1. Press self-locking switch on back of each BMU to turn on the BMUs.

Step 2. Turn on breaker on right side panel of BCU.

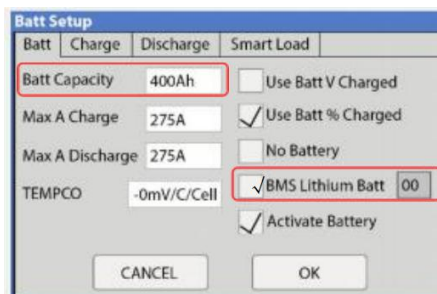
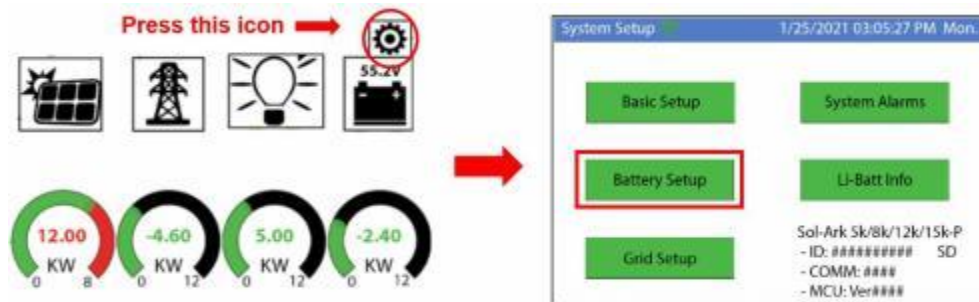
Step 3. Long Press soft power button on front of BCU for 0.5s to power on Pi LV1.

Step 4. Turn on the external breaker between Pi LV1 and PCS if applicable.

*Make sure that all batteries have been powered on, then to turn on the inverter. This is to avoid battery shock by the in-rush current of the large capacitors of the inverter.

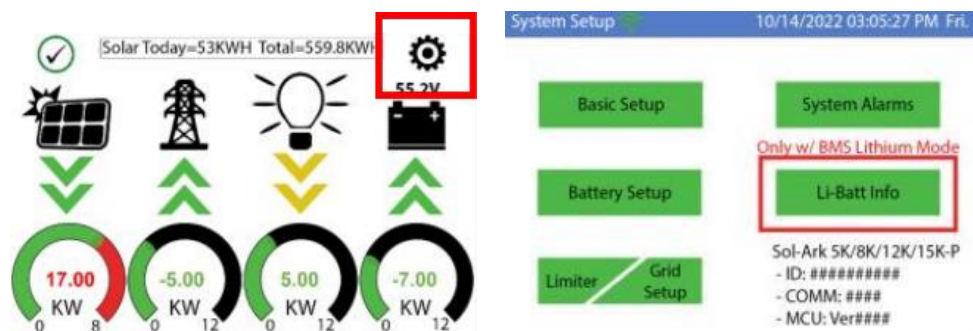
5. Program the inverter

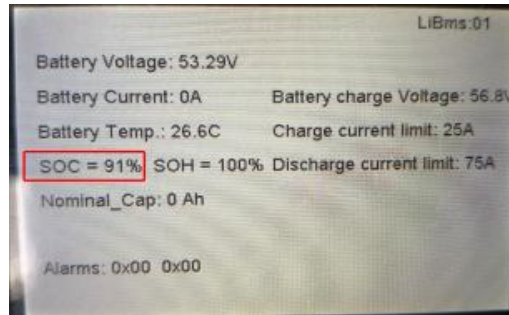
Press the gear icon on the top right of the screen and then press battery set up menu.



Change the "Batt Capacity" match module number. e.g. Four module →400Ah, Select "Use Batt% Charged" . Select "BMS Lithium Batt" and set its value to "00" . Turn on "Activate Battery" .Touch "OK" .

6. Confirm Inverter-Battery Communication





communication confirm

As shown in Figure 2.1.1.8, if the communication between the battery and the inverter is successful, the specific information of the battery will be displayed on the screen.

7. Other operations

WiFi Setting

Pi LV1 is integrated with WIFI for remote viewing battery data and firmware upgrading.

Use solar man App to monitor.

※CAUTION:If you want more details about system monitoring , please check the operating manual of inverters.



End User
(Solarman Smart)



Distributors & Installers
(Solarman Business)

*Battery Shut down Procedure

Step 1. Switch off the PCS.

Step 2. Long press soft power button on front of BCU for 0.5s, then to press the self-locking switch of first BMU next to BCU to turn off the system.

Please refer to the [Sol-Ark inverter manual](#) for more setting such as Grid Setup, PV Setting, Time-of-Use, etc.