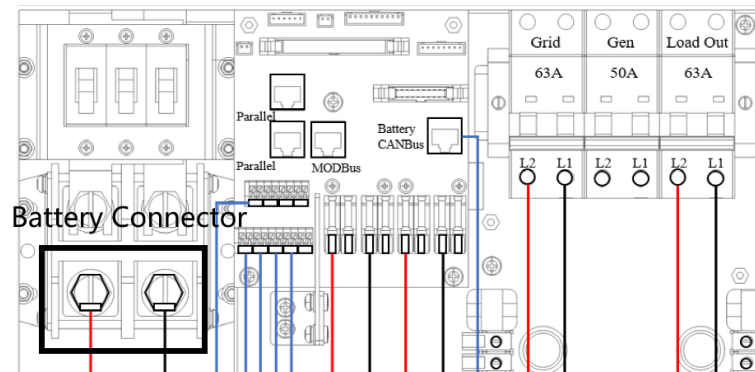## Connect the cables

Connect the power cables between inverter and battery or the Busbars as mentioned.

Figure 2.1 Sol-Ark Battery Connector



As for the cable gauge that connects the busbar to the inverter, 4/0 gauge power cable is commended for Sol-Ark 15K model and 3/0 gauge power cable is commended for 8K/12K model.
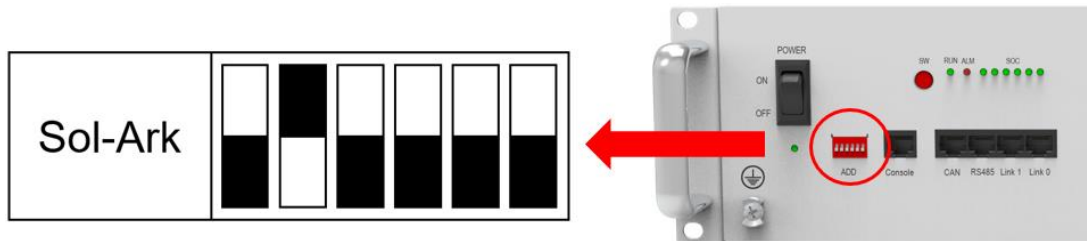
A standard ethernet cable can be used for the communication since Sol-Ark inverter pin assignment is the same as Pytes E-BOX battery.

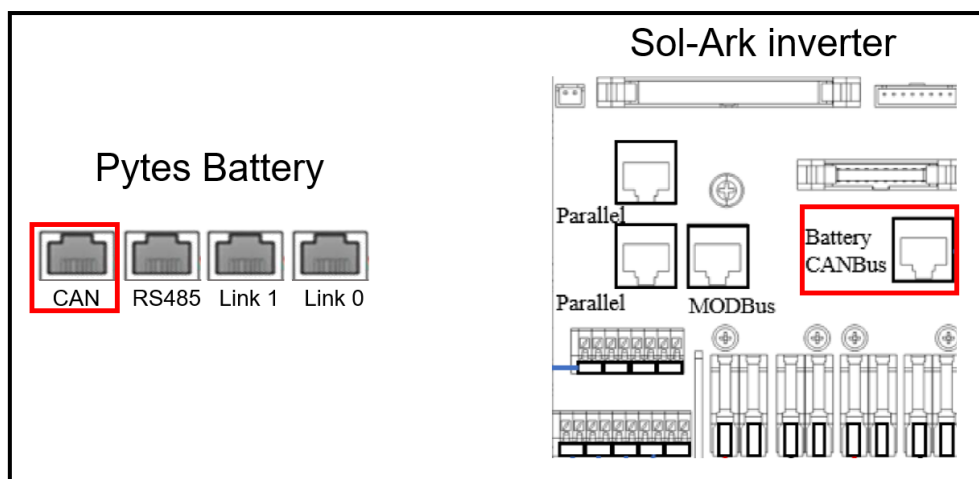Figure 2.2 Sol-Ark Standard ethernet cable
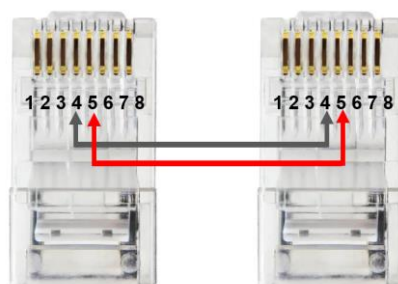
Set the DIP Switch of every master battery as Figure 2.3 shown.

Figure 2.3 Sol-Ark inverter DIP Switch Setting



Plug in the battery end into the **CAN port** of the Pytes E-BOX battery and plug in the inverter end into Sol-Ark Battery **CANBus** Port as shown in the Figure 2.4.
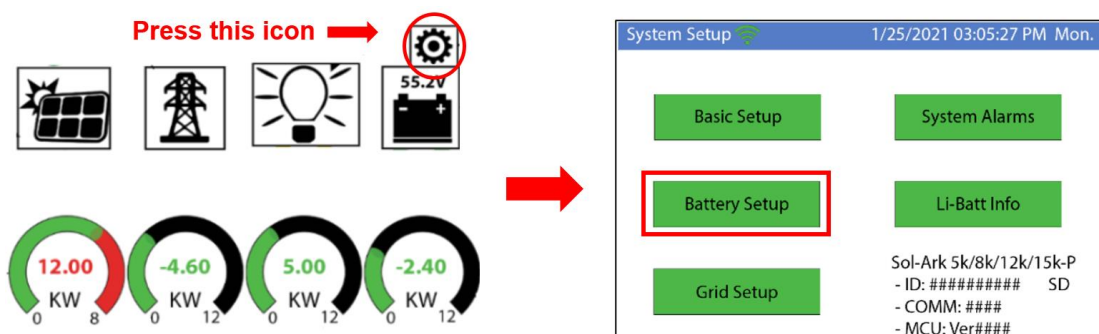
Figure 2.4 Sol-Ark inverter comm cable connection



## Program the inverter

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

Figure 2.5 Sol-Ark Batt Setup

**Set the battery parameters**

➢ Batt Capacity: 100Ah per unit

➢ Max A Charge/Discharge: 185A is the max amps that Sol-Ark 8K/12K mode supports and the corresponding number is 275A for 15K mode. Fill in the max amps or (50A*unit numbers) which is lower. (For example, there are three Pytes E-BOX batteries and one 12K Sol-Ark inverter in a system. The max amps of 12K is 185A and three batteries can support 150A(50*3). So the number should fill in is 150A.)

➢ Select "Use Batt% Charged".

➢ Enable "BMS Lithium Batt" and set its value to "00".

➢ Turn on "Activate Battery".

Note that enabling BMS Lithium Batt 00 will adjust some values and make other values unadjustable (like the temperature coefficient above). Just ignore those values - the BMS is in control.

Figure 2.6 Batt Setup
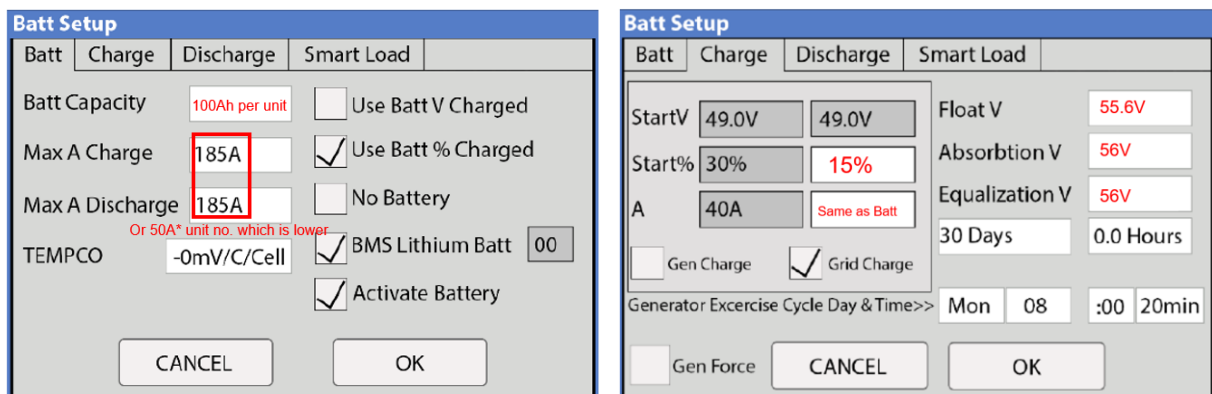


**Program the Charge tab in Batt Setup**

See the right picture in Figure 2.6.

➢ Start%: 15%

➢ A: Same as the Max A Charge in Batt Seting

➢ Float V: 55.6V

➢ Absorption V: 56V

➢ Equalization V: 56V

**Program the Discharge tab in Batt Setup**

➢ Shutdown: 10%

➢ Low Batt: 20%

➢ Batt Empty: 47.5V

Figure 2.7 Batt Discharge Setup



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

**Confirm Inverter-Battery Communication**

Figure 2.8 communication confirm