

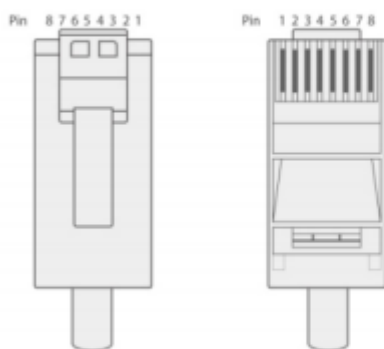
Q1: Why does the inverter report 'Battery communication failure'?

A: (1) If work with the lithium battery , please make sure it is compatible with the Lux units(please check with your installer or distributor)

- If the battery is compatible with Lux unit, please choose the battery type or brand on the LCD(Setting->Set battery->Choose Li battery->Choose battery brand)
- The cable inside the Luxpower carton box is used to Pylontech battery, if you are using Pylontech battery, you can use the cable directly. Please note there is lable attached with the cable, do not plug the battery side to the inverter side. If you install more than 8pcs Pylontech battery, you need a hub for the battery.

Make sure you have use the right communicate cable between battery and inverter(Different battery has different communication cable) . The terminal for battery communication port definition is as below:

RJ45 Terminal Configuration of Battery Communication



Pin	Function Description
1	BAT 485 B
2	BAT 485 A
3	BAT CAN L
4	BAT CAN H
5	NC
6	BAT NTC
7	BAT Wake UP
8	GND-S

- Please remember to connect Master battery to inverter if you have a battery group, and set Master battery for the battery

group.(Please contact battery manufacture for battery group setup)

Q2: How can I choose the battery brand?

You can set the battery by LCD or website(distributors), please refer user manual to set battery and choose battery brand

Q3: Why does the inverter report 'Battery failure' ?

The inverter will report battery failure if the battery can not be charged or discharged. Please contact your battery supplier to check the problem.

Q4 : Why the system show battery open circuit warning?

- Check if the battery connection is reversed.
- It is suggested to use multimeter to measure the battery voltage before connect to the inverter (input voltage range 40-60V), please pay attention to the battery polarities.
- After you check battery output voltage is normal, please check the breaker between inverter and battery is closed.

Q5: Why there is no battery voltage and SOC showing though I have connected the battery to the inverter ?

A: If you are using lithium battery , please make sure there is no communication error between inverter and battery .if you are using the lead-acid battery ,please check battery setting and change it to lead-acid mode .

Q6: What parameter should I set for Lead acid battery?

A: There are three stages for lead acid battery. For charge part, please set CV voltage and floating voltage. For discharge part, please set the

discharge cut off voltage for on grid and off grid.

Discharge Setting

System Discharge Power Rate (%) [0, 100] Set **On-grid Discharge Cut-off SOC (?) [10, 90] Set** **Off-grid Discharge Cut-off SOC [0, 90] Set**

Forced Discharge

Forced Discharge Enable Enable Disable Forced Discharge Power Rate (%) [0, 100] Set Forced Discharge Battery Level (%) [0, 100] Set

Forced Discharge Start Time 1 [0, 23] : [0, 59] Set Forced Discharge Start Time 2 [0, 23] : [0, 59] Set Forced Discharge Start Time 3 [0, 23] : [0, 59] Set

Forced Discharge End Time 1 [0, 23] : [0, 59] Set Forced Discharge End Time 2 [0, 23] : [0, 59] Set Forced Discharge End Time 3 [0, 23] : [0, 59] Set

Lead-acid Battery Setting

Discharge Cut-off Voltage (?) [40, 50] Set **Discharge Current Limit (?) [0, 140] Set**

Discharge Temperature Low Limit (?) [0, 100] Set Discharge Temperature High Limit (?) [0, 100] Set

Q7: Why battery does not discharge when grid is available, while it discharge normally when grid is not available ?

A: This issue is related with the

- Discharge cut-off level and discharge hours setting .

Grid available : Battery will discharge when $100\% \geq \text{SOC} > \text{On-grid discharge cut-off level (or BMS limitation)}$
Grid unavailable : Battery will discharge when $100\% \geq \text{SOC} > \text{off-grid discharge cut-off level (or BMS limitation)}$

- The system will not discharge if you enable AC charge at setting time

Q8: Why there is no output when grid is unavailable and battery energy is sufficient?

A: Back-up function should be enabled on APP or web page. And also check if it is set to 'standby' in the monitor system before enable EPS function.

Q9: Why does the SOC jump suddenly to 100% or 0% sometimes? (Lead acid)

A: When the inverter works in charge mode with lead-acid battery and the breaker of battery is forgotten to be turned on, and the charge power is almost zero, then the inverter will think it is fully charged and adjust the soc to 100%. When the inverter works in discharge mode and the breaker of battery is forgotten to be turned on, and there is no enough energy to discharge and battery voltage will drop rapidly, then the inverter will think

the battery energy is ran out and adjust the SOC to 0% . Please restart the inverter to reset the SOC.

Q10: Why battery does not get charged even though PV is sufficient and SOC is not reach 100%?(Lead acid)

A: For the old firmware(Before 2020/12), there are two stages for Lead acid charging. After the battery is full charged(charge to the setting voltage shortly), the system will not charge the battery until the battery voltage is lower than 50V or discharging power has happened.For new firmware, there will be three stages, and users can set CV charge voltage and floating charge voltage. And it will charge the battery to 100%If you have any problem when using lead acid battery with old firmware, please contact Luxpower for firmware update

Q11: Why does the SOC drop without discharging any power? Why is the battery 52V with 15% SOC ? (Lead-acid)

A: The SOC calculation of the lead-acid battery is not accurate. It's difficult to draw a exact Volt-soc curve because the voltage changes a lot when charging or discharging happens. So for lead acid battery, please focus on the voltage level.

Q12: Why battery does not discharge full power even though power limitation is 100%?(lithium)

A: The charge/discharge power will limited by both by inverter and BMS. For example , the discharge power limitation for inverter is 3000W, and there are only two Pylon US2000 connected to the inverter, so the peak discharge current limited by BMS is $25A * 2 = 50A$, so they system maximum discharge power is about $50V * 50A = 2500W$.