

高压电池组装注意事项及故障排查

High voltage battery assembly precautions and troubleshooting

目录/Catalogue

一：BOS-G 和 GB-L 型号的电池组装前注意事项.....	1
Note about BOS-G and GB-L battery packs before installation	
二：LCD 显示 BUM Number Config Error 的检查步骤.....	3
The checking procedure of BMU number configuration error displayed in LCD	
三：高压电池特殊故障.....	5
Special failure of the high voltage battery	
1. 报 RTC 时钟故障.....	5
The RTC clock is faulty	
2. 电流模块故障.....	5
Current module fault	
3. 外部 CAN 通讯失败.....	6
External CAN communication failed	

一：BOS-G 和 GB-L 型号的电池组装前注意事项

Note about BOS-G and GB-L battery packs before installation

1. 使用电池前请确认电池批次，优先选择同批次：可根据条形码识别（00803000B128036300：第9位代表年份，A是2022年，B是2023年；第10位是月，第11、12是天）

Please confirm the battery batch before using the battery. And then select the same batch in priority, which can be identified according to the barcode (00803000B128036300: The ninth letter is for the year of production, in which the A for 2022 and the B for the 2023, the 10th letter is for the month and the 11th and 12th for the date of production.)

3. 已经使用过的电池不能和新电池进行混用，已经使用过但不同组的电池也不能混用，如果在原有的簇架里想要增加电池来达到增加电量的目的，请联系厂家技术人员，在技术人员的指导下操作。

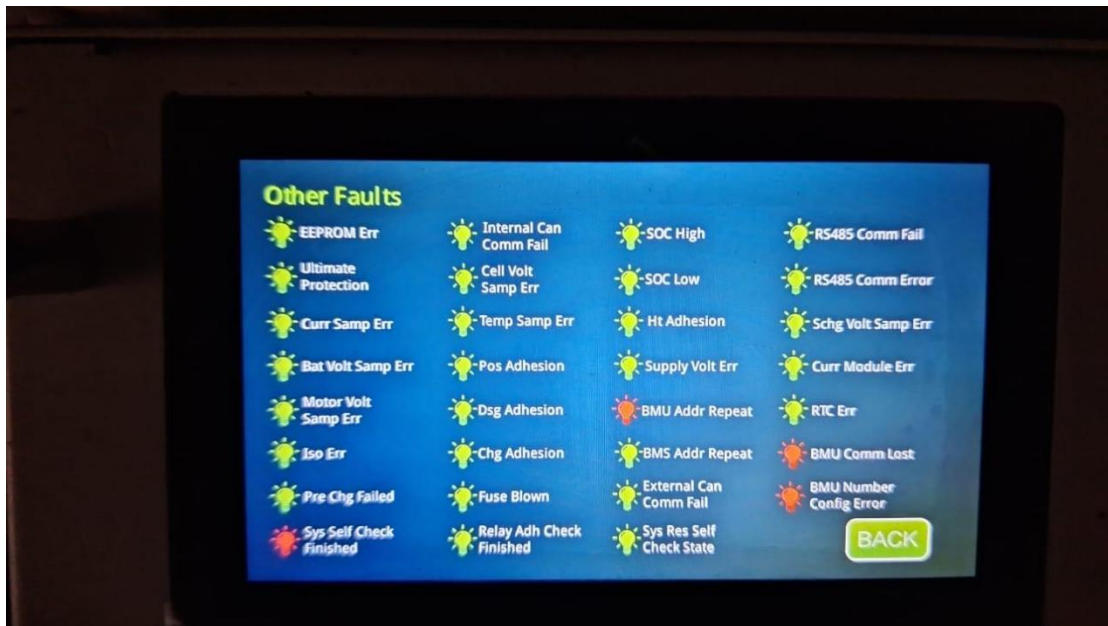
Used batteries can not be mixed with new batteries. Batteries that have been used but belong to different groups also can not be mixed. If you want to increase the number of batteries in the original cluster to increase the power, please contact the factory technical staff, and then operate under the guidance of the staff.

二：LCD 显示 BUM Number Config Error 的检查步骤

The checking procedure of BMU number configuration error displayed in LCD

1. 首先确认一簇使用了几个电池：比如使用了 10 个，在 BMU Number 页面把 12 改成 10 并重启设备。如图

1. First verify the number of battery packs used in a cluster of batteries. For example, if 10 battery packs are used, change 12 to 10 on the BMU Number page and restart the device. As is shown in the following figure:





2. 如果还有故障；把 BMU Number 改成 9 后重启设备，如果还有故障改成 8、7、6、5…….. 直到故障消失。比如 BUM Number 设置成 6 的时候故障消失了，那就是第 6 或者第 7 个电池有故障，把这个 2 个电池从簇架上拆下来，其他电池重新组装测试，看看是否还有故障，如果没有故障，把第 6 和 7 的任意一个电池和其他电池重新组装（排在其他电池的后面组装），这样就能挑选出是哪一个电池是损坏的，检查电池上面的通讯线束和端口里面的 PIN 针是否变形，并把损坏电池的 SN 提供给工程师等待下一步指示。

2. If there is still a fault, Change the BMU Number to 9 and restart the device. If the fault still exists, change the BMU Number to 8, 7, 6, and 5..... Until the failure disappears. For example, when the BUM Number is set to 6, the fault disappears, that is, the 6th or 7th battery is faulty. Then remove these two batteries from the cluster rack, and re-assemble the other batteries to test to see if there is still a fault. If there is no fault, reassemble any battery 6 and 7 with the other batteries (assembled behind the other batteries), so that you can pick out which battery is damaged. Check whether the communication harness on the battery and the PIN in the

port are deformed, and provide the SN of the damaged battery to the engineer for further instructions.

三：高压电池特殊故障

Special failure of the high voltage battery

1. 报RTC时钟故障

1. The RTC clock is faulty

分析方法：

Analytical method:

1) 正常使用一段时间后重启，观察故障是否消除

After the system runs normally for a period of time, restart it and check whether the fault is rectified

处理措施：

Treatment measure:

1) 若无法消除，更换 BMS

If not, replace the BMS

2. 电流模块故障

2. Current module fault

分析方法：

Analytical method:

1) 造成电流模块故障可能原因有：霍尔接线松动、脱落；霍尔方向接反；非 1001 正式版本的高压固件，可能存在误检测到霍尔接反；霍尔类型未配置；

The possible causes of the current module fault are as follows: The Hall cable is loose or disconnected. Hall direction is reversed; The HVDC firmware of the non-1001 official version may incorrectly detect a Hall reverse connection; The Hall type is not configured.

2) 确认是首次使用就出现电流模块故障还是使用中途出现，若开机就出现，或经常出现，一般为接线问题；若仅出现一次，可能是软件造成的误检；

Confirm whether the current module failure occurs on the first use or in the middle of use, if it occurs on the boot, or often, it is generally a wiring problem; If it occurs only once, it may be a false check caused by software.

处理措施:

Treatment measure:

1) 排查线束连接, 若连接完好故障仍存在, 更换霍尔器件或高压盒;

Check the wiring harness connection. If the fault persists, replace the Hall component or high voltage box.

2) 升级至 1001 及以上版本固件;

Upgrade to firmware version 1001 or later;

3. 外部CAN通讯失败

3. External CAN communication failed

分析方法:

Analytical method:

1) 该问题为电池与逆变器之间失去通讯引起;

The problem is caused by the loss of communication between the battery and the inverter.

处理措施:

Treatment measure:

1) 更换 PCS CAN 通讯线束, 若为线束问题, 更换线束解决;

Replace the PCS CAN communication wiring harness. If it is the wiring harness problem, please replace the wiring harness to solve it.

2) 检查高压盒后端 PCS 口的 RJ45 端子, 检查是否有针脚凹陷、偏移、不回弹, 若存在问题, 尝试用镊子挑起凹陷针脚或摆正针脚, 若不回弹或凹陷问题严重, 更换高压盒或更换 RJ45 端子小板解决;

Check the RJ45 terminal of the PCS port at the back end of the high voltage box to see if the pins are dented, offset, or do not rebound. If there is a problem, please try to pick up the dented pins with tweezers or straighten the pins. If there is no rebound or serious sag problem, please replace the high pressure box or replace the RJ45 terminal plate to solve the problem.



3) 拆盖检查高压盒内部，可使用万用表测量 RJ45 通讯小板与 BMS 板上的通断，以确认连接线束的好坏；若线束不通，更换线束或更换高压盒；

Remove the cover to check the inside of the high voltage box. Use a multimeter to measure the connection between the RJ45 communication panel and the BMS board to confirm the quality of the wiring harness. If the wiring harness is blocked, please replace the wiring harness or the high voltage box.

4) 若以上问题均无法解决，更换高压盒或更换 BMS 解决；

If the above problems can not be solved, please replace the high pressure box or replace the BMS.