

Prepare the serial port tool when logging in:

一、RS232 serial cable



1



二、Login to APP

名称	修改日期	类型	大小
10950_x86	2023/7/24 21:36	文件夹	
Config	2023/7/24 21:36	文件夹	
PbmsTools	2022/6/9 17:07	应用程序	690 KB
PbmsTools.exe.config	2020/7/15 13:36	CONFIG 文件	1 KB
上位机密码	2023/10/13 13:38	DOCX 文档	10 KB

三、Choose: COM5, Adr 1, and then Click “Open Serial”

The screenshot shows the PBmsLVToolsV0.40 software interface. The 'Serial' dropdown is set to 'COM5' and 'Adr' is set to '1'. The 'OpenSerial' button is highlighted with a red box. Other visible elements include the 'CurrentPACK' section with 'PACK: 1' and 'Host: 0', a 'Temperatures' table, and various system status indicators like 'WarningStatus' and 'ProtectStatus'.

Title	Temperature(°C)
TCell1	0.0
TCell2	0.0
TCell3	0.0
TCell4	0.0
MOS_T	0.0
ENV_T	0.0

Click “Start”

The screenshot shows the PBmsLVToolsV0.40 software interface after clicking 'Start Monitor'. The 'StartMonitor' button is highlighted in blue. The 'Serial' dropdown is now 'COM5' and 'Adr' is '1'. The 'CurrentPACK' section shows 'PACK: 1' and 'Host: 1'. The 'Temperatures' table shows updated values. The 'WarningStatus' and 'ProtectStatus' are now 'None'. The 'SwitchControl' section shows 'CHG ON', 'DSG ON', 'Alarm OFF', 'LED ON', 'Limit ON', and 'SysLock OFF'. The 'PACEex 沛城' logo is visible at the bottom.

Title	Temperature(°C)
TCell1	27.3
TCell2	27.0
TCell3	26.5
TCell4	27.3
MOS_T	29.7
ENV_T	29.1

四、Parameters appear on the left, indicating that communication with the battery has been established.

BatteryInfo

TotalVoltage:	52.571	V
Current:	0	A
SOC:	59	%
SOH:	100	%
RemainCapacity:	245710	mAh
FullCapacity:	415810	mAh
CycleTimes:	6	
IndV1:	52.741	V
IndC1:	0	A

CurrentPACK

PACK: 1
Host: 1

Temperatures

Title	Temperature(°C)
TCell1	27.3
TCell2	26.8
TCell3	26.5
TCell4	27.3
MOS_T	26.6
ENV_T	29.0

SystemStatus(Only read)

CHGMOS DSGMOS
 CHGCurValid Heating
 DSGCurValid ACIn
 LimitCurrent Fully

SingleBatteryVoltages

Number	Voltage(mV)	Balanced
1	3285	
2	3286	
3	3286	
4	3286	
5	3286	
6	3286	
7	3286	
8	3286	
9	3285	
10	3286	
11	3286	
12	3286	
13	3286	
14	3286	
15	3286	
16	3283	

MaxVolt: 3286 mV **VoltDiff:** 3 mV
MinVolt: 3283 mV

SwitchControl

CHG ON DSG ON
 Alarm OFF LED ON
 Limit ON SysLock OFF
 ForcedSleep

PACEex 沛城

06/17/2024 14:14:32 Firmware: P16S200A-31513-1.00 BMS S/N: 315131033000009A PACK S/N: English Running

五、Back to top of APP, the second page “ParallerMonitor” Click: ParallerMonitor

Check both items in the lower left corner at the same time, and the parallel battery data will appear in the dialog box

ParallerMonitor

序号	时间	PackNo	电流(A)	总电压(V)	剩余容量(mAh)	满容量(mAh)	SOC(%)	单体最高(mV)	单体最低(mV)	告警信息	
20	2024/6/17 14:17:09	1	0	52.571	245710	415810	59	3286	3283	无	无
21	2024/6/17 14:17:10	1	0	52.571	245710	415810	59	3286	3283	无	无
22	2024/6/17 14:17:11	1	0	52.571	245710	415810	59	3286	3283	无	无
23	2024/6/17 14:17:12	1	0	52.571	245710	415810	59	3286	3283	无	无
24	2024/6/17 14:17:13	1	0	52.571	245710	415810	59	3286	3283	无	无
25	2024/6/17 14:17:15	1	0	52.571	245710	415810	59	3286	3283	无	无
26	2024/6/17 14:17:16	1	0	52.571	245710	415810	59	3286	3283	无	无
27	2024/6/17 14:17:17	1	0	52.571	245710	415810	59	3286	3283	无	无
28	2024/6/17 14:17:18	1	0	52.571	245710	415810	59	3286	3283	无	无
29	2024/6/17 14:17:19	1	0	52.571	245710	415810	59	3286	3283	无	无
30	2024/6/17 14:17:21	1	0	52.571	245710	415810	59	3286	3283	None	None
31	2024/6/17 14:17:22	1	0	52.571	245710	415810	59	3286	3283	None	None
32	2024/6/17 14:17:23	1	0	52.571	245710	415810	59	3286	3283	None	None
33	2024/6/17 14:17:24	1	0	52.571	245710	415810	59	3286	3283	None	None
34	2024/6/17 14:17:25	1	0	52.571	245710	415810	59	3286	3283	None	None

ShowMonitor
 SaveToDatabase

06/17/2024 14:17:25 Firmware: P16S200A-31513-1.00 BMS S/N: 315131033000009A PACK S/N: English Running

六、The third page “SaveRecord”, Click “SaveRecord”.

The battery data will appear in the dialog box. Click “ExportRecord” to copy the data.

No	Date Time	PackNo	Current(A)	TotalVoltage(V)	RemainingCapacity(mAh)	FullCapacity(mAh)	SOC(%)	SingleMaxVoltage(mV)	SingleAh
38	2023-10-9 21:31:40	1	-40.14	54.926	415970	415980	100	3475	3372
38	2023-10-9 21:31:39	1	-40.05	55.123	415980	415980	100	3492	3392
39	2023-10-9 21:21:34	1	40.11	56.484	402620	417230	96	3653	3476
41	2023-10-9 21:21:6	1	40.11	56.177	399550	417230	96	3602	3469
42	2023-10-9 10:39:39	1	9.95	44.363	0	417310	0	2785	2759
43	2023-10-9 10:39:37	1	9.86	44.356	0	417310	0	2785	2758
44	2023-10-9 10:39:29	1	0	44.283	0	417310	0	2779	2754
45	2023-10-9 10:38:46	1	0	44.279	0	417310	0	2779	2754
46	2023-10-9 10:38:17	1	0	44.283	0	417310	0	2779	2754
47	2023-10-9 10:37:54	1	0	44.282	0	417310	0	2779	2754
48	2023-10-9 10:37:24	1	0	44.283	0	417310	0	2779	2754
49	2023-10-9 10:36:21	1	0	44.282	0	417310	0	2779	2754
50	2023-10-9 10:35:51	1	0	44.284	0	417310	0	2779	2754
51	2023-10-9 10:31:23	1	0	44.279	0	417310	0	2779	2754
52	2023-10-9 10:30:53	1	0	44.283	0	417310	0	2779	2754
53	2023-10-9 9:35:2	1	0	44.081	0	417310	0	2768	2741
54	2023-10-9 9:34:32	1	-40.1	43.643	0	417310	0	2746	2698

Buttons: ReadRecord, Continue, DeleteRecord, ExportRecord

Footer: 06/17/2024 14:28:46 Firmware: P16S200A-31513-1.00 BMS S/N: 315131033000009A PACK S/N: English Running

七、The four page, “ExportRecord” (As long as the data is read in the third item, the information will be displayed in the fourth item and saved for 2 months. This data is what we call the alarm record, which can be copied for analysis)

TableName	SaveTime
data20240617141647	06/17/2024 14:16:47

Buttons: ExportData, Delete, DeleteAll

Footer: 06/18/2024 09:39:25 Firmware: P16S200A-31513-1.00 BMS S/N: 315131033000009A PACK S/N: English

八、The five page “ParamSetting”, battery parameter information (Parameter Setting)
 (It is recommended that customers can only preview and not modify easily.)

The screenshot shows the 'ParamSetting' page with the following data tables and configuration sections:

	Alarm(V)	Protect(V)	ProtectRec(V)	IsEnable	ProtectDelay(ms)
CellOverCHG	3.60	3.65	3.38	<input checked="" type="checkbox"/>	1000
CellOverDSG	2.80	2.70	2.85	<input checked="" type="checkbox"/>	1000
PackOverCHG	57.60	58.40	54.00	<input checked="" type="checkbox"/>	1000
PackOverDSG	44.80	43.20	45.60	<input checked="" type="checkbox"/>	1000

	Alarm(°C)	Protect(°C)	ProtectRec(°C)	IsEnable
CHG OT	60	65	55	<input checked="" type="checkbox"/>
CHG UT	0	-5	0	<input checked="" type="checkbox"/>
DSG OT	65	70	60	<input checked="" type="checkbox"/>
DSG UT	-15	-20	-15	<input checked="" type="checkbox"/>
MOS OT	90	115	85	<input checked="" type="checkbox"/>
Amb OT	65	75	65	<input checked="" type="checkbox"/>
Amb UT	-15	-20	-15	<input checked="" type="checkbox"/>

Configuration sections on the right:

- CHGCurrent**:
 - IsEnable:
 - CHGCurrentWarning(A): 205
 - CHGCurrentProtect(A): 210
 - CHGCurrentProtectDelay(ms): 1000
- BatteryParameter**:
 - Cut Off Voltage(V): 56.00
 - Cut Off Current(mA): 2000
 - Low Battery Warning(%): 5
- DSGCurrent**:
 - IsEnable:
 - DSGCurrentWarning(A): 205
 - DSGCurrentProtect1(A): 210
 - DSGCurrentProtectDelay1(ms): 1000
 - DSGCurrentProtect2(A): 250
 - DSGCurrentProtectDelay2(ms): 100

Buttons at the bottom: ReadParameter, WriteParameter, ResetParameter, ClearParameter, Export, Import.

Status bar: 06/18/2024 09:40:52 Firmware: P16S200A-31513-1.00 BMS S/N: 315131033000009A PACK S/N: English Running

九、The six page “SystemSetting”, to set up the inverter protocol (except for modifying the protocol, the rest is for customer reference only, please do not modify the internal parameters by mistake).

The screenshot shows the 'SystemSetting' page with the following data tables and configuration sections:

	Alarm(V)	Protect(V)	ProtectRec(V)	IsEnable	ProtectDelay(ms)
CellOverCHG	3.60	3.65	3.38	<input checked="" type="checkbox"/>	1000
CellOverDSG	2.80	2.70	2.85	<input checked="" type="checkbox"/>	1000
PackOverCHG	57.60	58.40	54.00	<input checked="" type="checkbox"/>	1000
PackOverDSG	44.80	43.20	45.60	<input checked="" type="checkbox"/>	1000

	Alarm(°C)	Protect(°C)	ProtectRec(°C)	IsEnable
CHG OT	60	65	55	<input checked="" type="checkbox"/>
CHG UT	0	-5	0	<input checked="" type="checkbox"/>
DSG OT	65	70	60	<input checked="" type="checkbox"/>
DSG UT	-15	-20	-15	<input checked="" type="checkbox"/>
MOS OT	90	115	85	<input checked="" type="checkbox"/>
Amb OT	65	75	65	<input checked="" type="checkbox"/>
Amb UT	-15	-20	-15	<input checked="" type="checkbox"/>

Configuration sections on the right:

- Voltage(mV)**:
 - BaseVoltage: 0 [Calibrator]
 - TotalVoltage: 0 [Calibrator]
- Current(mA)**:
 - ChargeCurrent: 0 [Calibrator] [Reset]
 - ZeroCurrent: 0 [Calibrator]
 - DisChargeCurrent: 0 [Calibrator] [Reset]
- BMS Num Setting**:
 - BatteryNum: 0 [Write]
- CHGCurrentSetting**:
 - StartUpCurrent(A): 0 [Read] [Write]
 - Limit Gear: Low [Write]
- IntermitentCHGSetting**:
 - IntermitentCHGLim: [Write]
- Electricity(mAh)**:
 - RemainingCapacity: 0 [Read] [Write]
 - FullCapacity: 0
 - DesignCapacity: 0
- Cycle**:
 - CycleTimes: 0 [Write]
- ProductInfo**:
 - BMS ProductInfo: [Write]
 - PACE ProductInfo: [Write]
- InverterProtocolSetting**:
 - CANProtocol: [Dropdown]
 - 485Protocol: [Dropdown]
 - [Read] [Write]

Status bar: 06/18/2024 09:58:52 Firmware: P16S200A-31513-1.00 BMS S/N: 315131033000009A PACK S/N: English Running

1、 Note that when selecting a protocol, you must enter the password on the APP homepage to select the protocol and write it into the protocol.

The modification process is as follows: In the lower right input box: 123456

The screenshot shows the 'RealTimeMonitor' tab of the PBmsLVToolsV0.40 software. The interface is divided into several sections:

- BatteryInfo:** TotalVoltage: 52.548 V, Current: 0 A, SOC: 59%, SOH: 100%, RemainCapacity: 245140 mAh, FullCapacity: 415810 mAh, CycleTimes: 6, IndV1: 52.7 V, IndC1: 0 A.
- CurrentPACK:** PACK: 1, Host: 1.
- Temperatures:** A table showing temperatures for TCell1 (26.8), TCell2 (26.6), TCell3 (26.7), TCell4 (26.9), MOS_T (27.3), and ENV_T (29.7).
- SystemStatus(Only read):** CHGMOS, DSGMOS, CHGCurValid, Heating, DSGCurValid, ACIn, LimitCurrent, Fully.
- SingleBatteryVoltages:** A table with columns for Number, Voltage(mV), and Balanced. All voltages are 3283 mV.
- MaxVolt:** 3285 mV, VoltDiff: 2 mV, MinVolt: 3283 mV.
- SwitchControl:** CHG ON, DSG ON, Alarm OFF, LED ON, Limit ON, SysLock OFF, ForcedSleep.
- WarningStatus, ProtectStatus, MalfunctionStatus:** All show 'None'.
- Bottom Right:** A red box highlights the password input field containing '123456'.

The bottom status bar shows: 06/18/2024 09:55:14 Firmware: P16S200A-31513-1.00 BMS S/N: 31513103300009A PACK S/N: English Running.

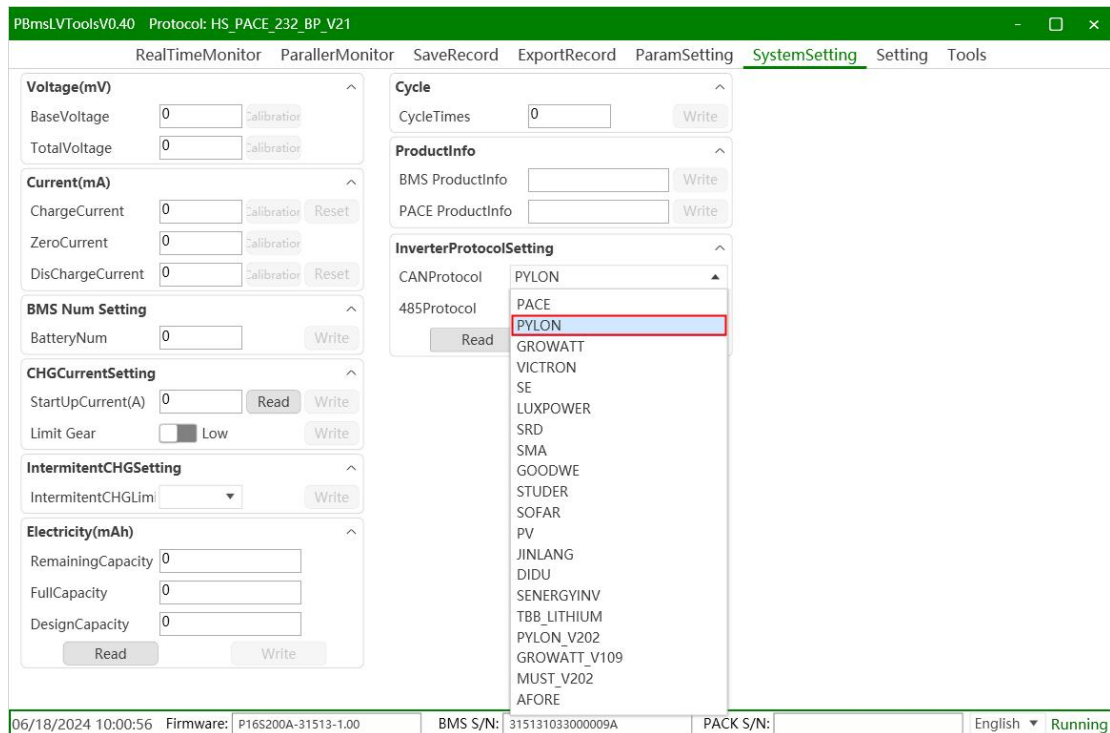
2、 Back to page 5 “SystemSetting”, Click “Read”

The screenshot shows the 'SystemSetting' tab of the PBmsLVToolsV0.40 software. The interface is divided into several sections:

- Voltage(mV):** BaseVoltage, TotalVoltage (both 0).
- Current(mA):** ChargeCurrent, ZeroCurrent, DisChargeCurrent (all 0).
- BMS Num Setting:** BatteryNum (0).
- CHGCurrentSetting:** StartUpCurrent(A) (0), Limit Gear (Low).
- IntermitentCHGSetting:** IntermitentCHGLim.
- Electricity(mAh):** RemainingCapacity, FullCapacity, DesignCapacity (all 0).
- Cycle:** CycleTimes (0).
- ProductInfo:** BMS ProductInfo, PACE ProductInfo.
- InverterProtocolSetting:** CANProtocol (PYLON), 485Protocol (WOW). A red box highlights this section, and the 'Read' button is highlighted.

The bottom status bar shows: 06/18/2024 09:49:06 Firmware: P16S200A-31513-1.00 BMS S/N: 31513103300009A PACK S/N: English Running.

3、 Select inverter protocol, for example: PYLON



4、 then click "Write" The lower right corner will show "Write successfully", which means OK.

