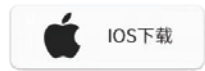


## 多蓝牙操作说明

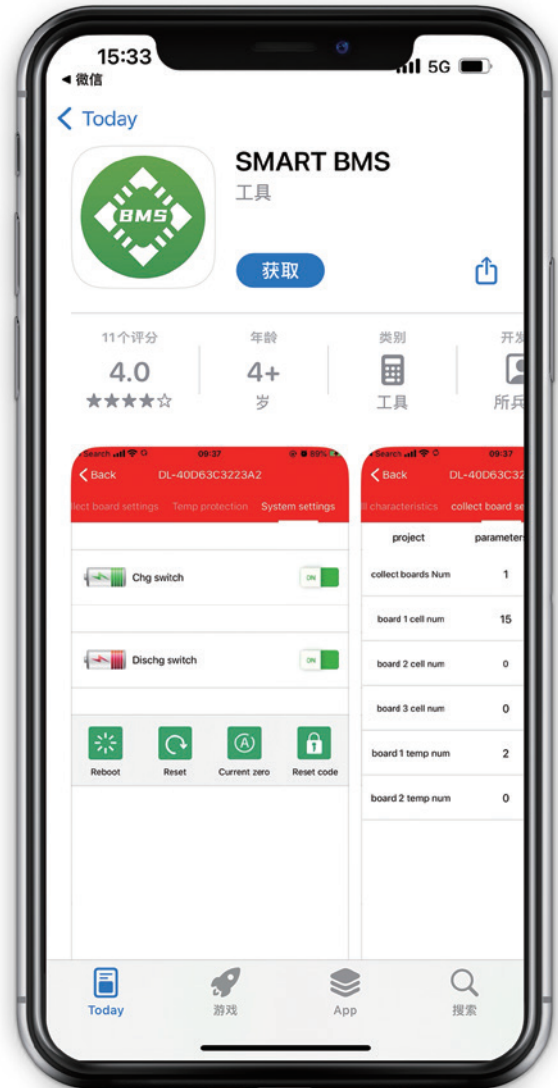
Multi Bluetooth operating instructions



Android Download



IOS Download



BSL NEW ENERGY CO., LIMITED

· US Warehouse Address :Dallas ,TX ,US

· Hong Kong Address: Flat A112, 1/f, Lee Ka Industrial Building, 8 Ng Fong Street, San Po Kong, Kowloon, Hong Kong, China Vat: 74592871

Tel: +86-752-2819469

www.lithium-battery-factory.com

# 目录

## Table of contents

1.概述Overviews.....	第3页 Page 3
2. 安装说明Installation Instructions.....	第5页 Page 5
2.1 搜索下载Search Download.....	第5页 Page 5
2.2 安装打开Install Connections.....	第6页 Page 6
2.3 进入APP Connecting.....	第6页 Page 6
3. 操作说明 Parameter reading.....	第7页 Page 7
3.1 选择单串操作Select single string operation.....	第8页 Page 8
3.2 选择并联操作Select parallel operation.....	第9-10页 Page 9-10
3.3 选择串联操作Select Tandem Operation.....	第11-12页 Page 11-12
4. 主动均衡Active equalization.....	第13页 Page 13
5. 参数设置Parameter setting.....	第14页 Page 14

## 1.概述(overview)

多蓝牙通讯手机APP系统主要是通过手机蓝牙功能连接专用蓝牙设备，蓝牙设备与BMS之间进行通信，这样用户就可以直接通过手机探测BMS信息，实行读取、管理、查询及管理功能，从而取代专用的BMS设备和软件。

The Multi Bluetooth communication mobile phone APP system mainly connects the special Bluetooth device through the Bluetooth function of the mobile phone, and the Bluetooth device communicates with the BMS, so that the user can detect the BMS information directly through the mobile phone and carry out the functions of reading, managing, querying and managing, thus replacing the special BMS equipment and software.

多蓝牙通讯手机APP系统包括实时数据读取、主动均衡、保护参数、电芯特性、采集板设置、温度保护、系统设置和查询等功能。

系统主要功能为：

Multi Bluetooth mobile phone APP system includes functions such as multiple protection boards in parallel and multiple protection boards in series for real-time data reading, protection parameters, cell characteristics, collection board settings, temperature protection, system settings and queries.

The main functions of the system are:

- 1)参数读取：报警故障信息、温度个数、电池串数、软件版本
- 2)主动均衡：均衡状态、均衡电流、均衡位置、均衡参数设置、均衡开关
- 3)保护参数：单体过压保护、单体欠压保护、总体过压保护、总体欠压保护、压差保护、充电过流保护、放电过流保护。
- 4)电芯特性：电池类型、额定容量、单体基准电压、休眠等待时间、SOC设置、均衡开路电压、均衡开启压差。
- 5)采集板设置：采集板个数、采集板1单体个数、采集板2单体个数、采集板3单体个数、采集板1单体温度个数、采集板2单体温度个数、采集板3单体温度个数。
- 6)温度保护：充电高温保护、充电低温保护、放电高温保护、放电低温保护、温差保护、功率管温度保护。
- 7)系统设置：充电开关、放电开关、重启系统、恢复出厂设置、电流归零、重置密码。
- 8)体现串并联总数数据显示以及单组使用多种方式

- 1) Parameter reading: alarm fault information, number of temperature, number of battery strings, software version
- 2) Active equalization: equalization state, equalization current, equalization position, equalization parameter setting, equalization switch
- 3) Protection parameters: single over voltage protection, single under voltage protection, overall over voltage protection, overall under voltage protection, differential voltage protection, charging over current protection, discharge over current protection.
- 4) Cell characteristics: battery type, rated capacity, single reference voltage, sleep waiting time SOC setting, equalizing opening voltage, equalizing opening differential pressure.
- 5) Collection board settings: number of collection boards, number of monomer of collection board 1, number of monomer of collection board 2, number of monomer of collection board 3, number of monomer temperature of collection board 1, number of monomer temperature of collection board 2, number of monomer temperature of collection board 3.
- 6) Temperature protection: charging high temperature protection, charging low temperature protection, discharge high temperature protection, discharge low temperature protection, temperature difference protection, power tube temperature protection.
- 7) System settings: charging switch, discharging switch, system restart, factory reset, current reset, password reset.
- 8) Reflect the data display of the total number of series and parallel connections and multiple ways of single group use

## 系统特点 ( System characteristics )

- 1) 告警提示：告警故障查看，故障解除后告警提示自动消除。
  - 2) 手机蓝牙：当用户打开软件后，如果用户没有开启蓝牙功能，则自动提示开启手机蓝牙，拔电或者休眠自动断开蓝牙连接。
- 1) Alarm prompt: alarm fault view, alarm prompt automatic elimination after fault release.
  - 2) Bluetooth: When the user opens the software, if the user does not turn on the Bluetooth function, then automatically prompt to turn on the phone Bluetooth, unplug or sleep automatically disconnect Bluetooth connection.

## 2.安装说明 (Installation Instructions)

安卓手机(Android phones):

在华为应用中心下载 SMART BMS 这个APP(Download SMART BMS App from Huawei App Center)

也可点击此链接直接跳转下载(You can also click this link to jump directly to download)

<https://appgallery.huawei.com/#/app/C102450269>

PS:其它手机也可以直接通过浏览器直接点以下链接安装

(Other phones can also be installed directly through the browser by clicking the following link)

[https://www.dalyelec.cn/daly/SMART\\_BMS.apk](https://www.dalyelec.cn/daly/SMART_BMS.apk)

苹果手机(Apple phones):

在APP STORE中搜索SMART BMS 这个APP(Search SMART BMS APP in APP STORE)

也可点击此链接直接跳转下载(You can also click this link to jump directly to download)

<https://apps.apple.com/cn/app/smart-bms/id1519968339>

### 2.1 进入手机应用商店搜索“SMART BMS”，下载

2.1 Enter the mobile app store to search “SMART BMS”，download



## 2.2 下载并安装到手机桌面(以 IOS 为例)

2.2 Download and install to the mobile desktop (take IOS as an example)



## 2.3 打开下载的“SMART BMS” APP

2.3 Open the downloaded "SMART BMS" APP



### 3.操作说明Operating Instructions

先下载APP，安装后打开APP，进入使用APP是不需要账户的。进入后它就会提示您开启手机蓝牙，确认打开手机蓝牙后，收集一下电池组蓝牙编号就可以连接了。

注意点：

- 1、电池组的蓝牙只有在充电和放电过程中是常开状态，随时可以连接。
- 2、同一个蓝牙编号只能连接1台手机（手机APP可以设置并联后可以同时连接5台电池组）。
- 3、电池组搁置时，蓝牙待机时间为3分钟，想要查看电池组蓝牙，就必须给电池组充放电一次，从新激活蓝牙。

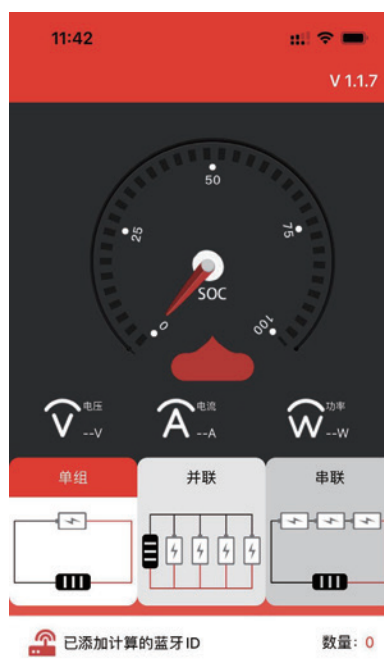
First download the APP, install it and open it, enter to use the APP is no account required. After entering it will prompt you to open the phone Bluetooth, confirm to open the phone Bluetooth, collect the battery pack Bluetooth number and you can connect.

Points to note:

1. the battery pack Bluetooth only in the charging and discharging process is always on, can be connected at any time.
2. the same Bluetooth number can only be connected to 1 cell phone (cell phone APP can be set to connect 5 battery packs at the same time after parallel connection).
3. the battery pack on hold, Bluetooth standby time for 3 minutes, want to view the battery pack Bluetooth, you must charge and discharge the battery pack once. Activate Bluetooth from new.

进入“SMART BMS” APP 显示界面分别可以选择单组、并联、串联；

Entering the "SMART BMS" APP display interface, you can select single group, parallel connection and series connection respectively;



### 3.1 选择单串操作

点击图一单组选项，显示图二单组选中界面，同时跳转至图三蓝牙ID列表界面,图三界面显示的ID只能选择其中一个;也可以在搜索栏输入蓝牙ID如图四所示，如图五选中蓝牙ID成功同时跳转至图六界面即可进行数据监控及参数设置；如需查看蓝牙连接点击图六左上角“蓝牙连接”即可；如需要返回主界面点击图六右上角“返回主界面”即可

### 3.1 Select single string operation

Click the single group option in Figure 1 to display the single group selection interface in Figure 2. At the same time, it jumps to the Bluetooth ID list interface in Figure 3. Only one of the IDs displayed in Figure 3 can be selected; You can also enter the Bluetooth ID in the search bar, as shown in Figure 4. If you successfully select the Bluetooth ID in Figure 5 and jump to the interface in Figure 6, you can monitor the data; To view the Bluetooth connection, click "Bluetooth connection" at the top left corner of Figure 6; If you need to return to the main interface, click "Return to the main interface" at the top right corner of Figure 6



图1(Figure 1)



图2(Figure 2)



图3(Figure 3)

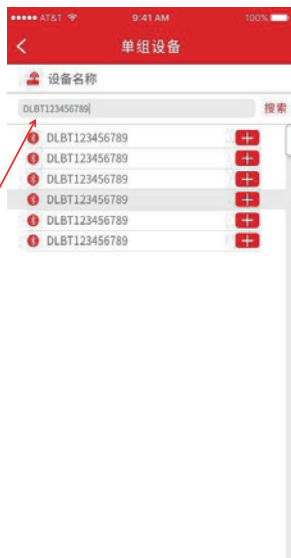


图4(Figure 4)



图5(Figure 5)



图6(Figure 6)



### 3.2选择多蓝牙并联操作

点击图一并联选项，显示图二并联选中界面同时弹出一个如图三所示的告警提示，点击继续同时跳转至图四蓝牙ID列表界面,图四界面显示的ID可以选择其中任意六个（最多只能选择六个ID）；也可以在搜索栏输入蓝牙ID如图五所示，如图六选中蓝牙ID成功同时会弹出ID达上限提示，点击确定跳转至图七界面即可进行数据监控参数设置；如需查看蓝牙连接点击图八左上角“蓝牙连接”即可；如需要返回主界面点击图八右上角“返回主界面”即可

### 3.2 Select Multi Bluetooth Parallel Operation

Click the paralleling option as shown in Figure 1, and an alarm prompt as shown in Figure 3 pops up at the same time on the paralleling selection interface as shown in Figure 2. Click OK to jump to the Bluetooth ID list interface as shown in Figure 4, and any six of the IDs displayed in Figure 4 can be selected (at most six IDs can be selected); You can also enter the Bluetooth ID in the search bar, as shown in Figure 5. If the Bluetooth ID is selected successfully in Figure 6, a prompt indicating that the ID has reached the upper limit will pop up. Click OK to jump to the interface in Figure 7 for data monitoring; To view the Bluetooth connection, click "Bluetooth connection" at the top left corner of Figure 8; If you need to return to the main interface, click "Return to the main interface" at the top right corner of Figure 8



图1(Figure 1)

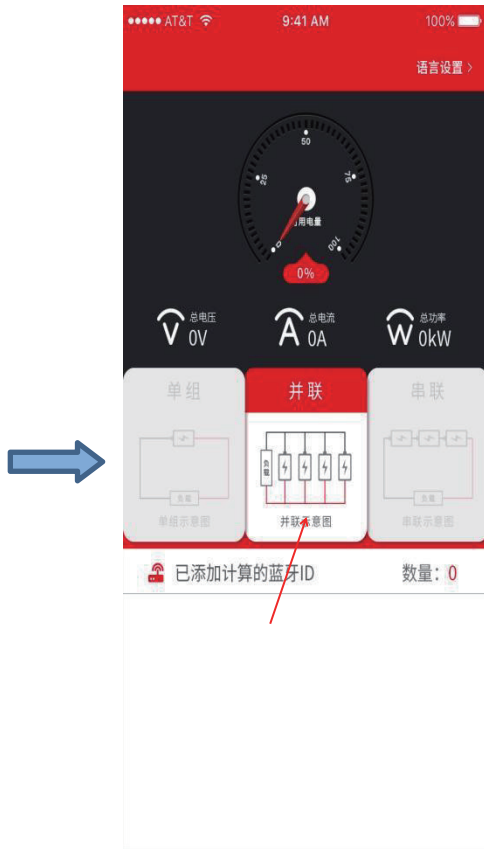


图2(Figure 2)



图3(Figure 3)

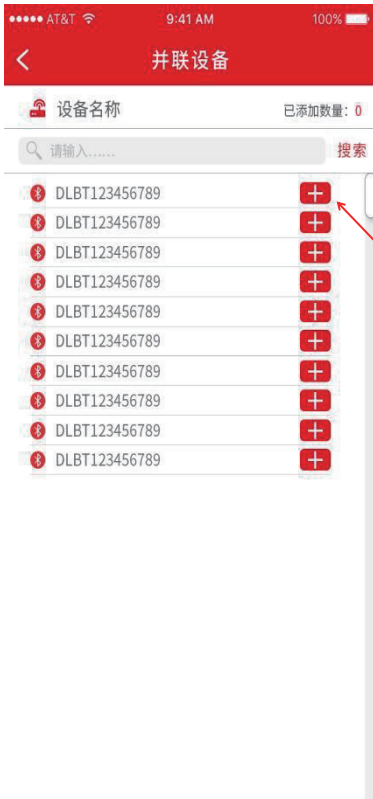


图4(Figure 4)

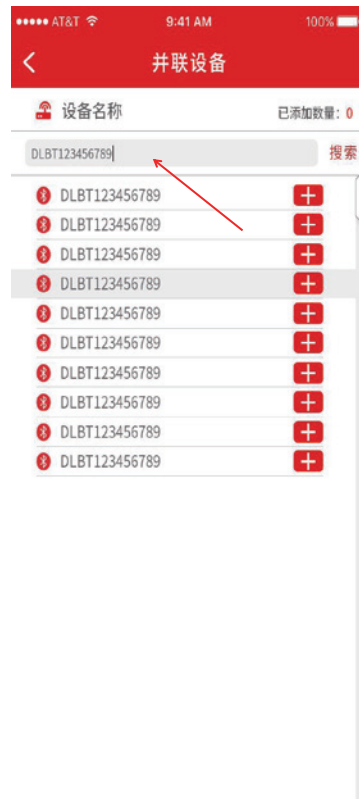


图5(Figure 5)

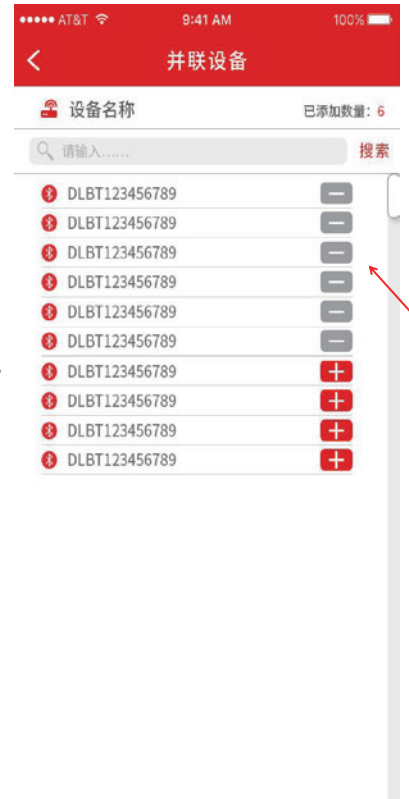


图6(Figure 6)



图7(Figure 7)



图8(Figure 8)

### 3.3选择多蓝牙串联操作

点击图一串联选项，显示图二串联选中界面同时弹出一个如图三所示的告警提示，点击继续同时跳转至图四蓝牙ID列表界面,图四界面显示的ID可以选择其中任意六个（最多只能选择六个ID）；也可以在搜索栏输入蓝牙ID如图五所示，如图六选中蓝牙ID成功同时会弹出ID达上限提示，点击确定跳转至图七界面即可进行数据监控参数设置；如需查看蓝牙连接情况点击图八左上角“蓝牙连接”即可；如需要返回主界面点击图八右上角“返回主界面”即可

### 3.3 Select Multi Bluetooth Serial Operation

Click the paralleling option as shown in Figure 1, and an alarm prompt as shown in Figure 3 pops up at the same time on the paralleling selection interface as shown in Figure 2. Click OK to jump to the Bluetooth ID list interface as shown in Figure 4, and any six of the IDs displayed in Figure 4 can be selected (at most six IDs can be selected); You can also enter the Bluetooth ID in the search bar, as shown in Figure 5. If the Bluetooth ID is selected successfully in Figure 6, a prompt indicating that the ID has reached the upper limit will pop up. Click OK to jump to the interface in Figure 7 for data monitoring; To view the Bluetooth connection, click "Bluetooth connection" at the top left corner of Figure 8; If you need to return to the main interface, click "Return to the main interface" at the top right corner of Figure 8



图1(Figure 1)



图2(Figure 2)



图3(Figure 3)

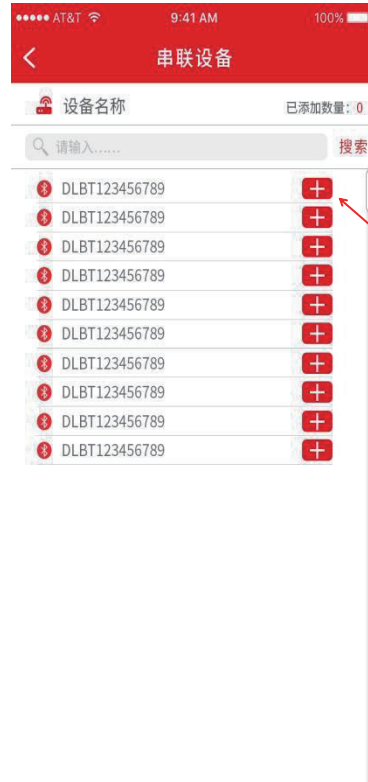


图4(Figure 4)

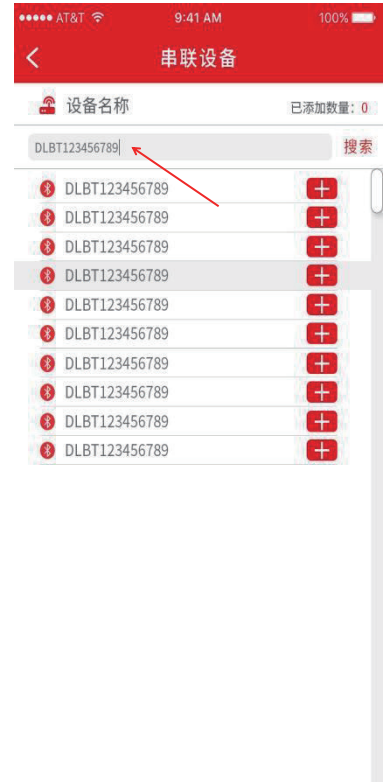


图5(Figure 5)

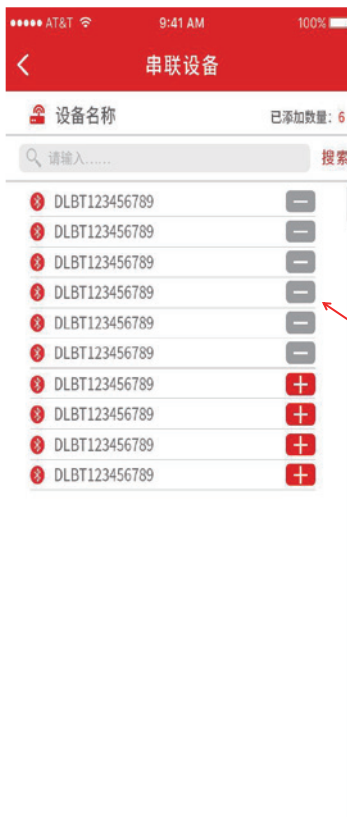


图6(Figure 6)



图7(Figure 7)



图8(Figure 8)

## 4.主动均衡

主动均衡数据监控及均衡参数设置界面（参数可根据实际需求设置）

### 4. Active equalization

Active balance data monitoring and balance parameter setting interface (parameters can be set according to actual needs)



10:54 主动均衡

均衡状态: OFF

均衡电流: 0.0A

均衡位置: 0

均衡参数设置

均衡电流:	0.0A	请输入	设置
电池串数:	0	请输入	设置
放电高温保护:	70°C	请输入	设置
放电低温保护:	-40°C	请输入	设置
休眠等待时间:	65535S	请输入	设置
均衡开启压差:	0.05V	请输入	设置
均衡开启电压:	3.80V	请输入	设置
单体过压保护:	4.25V	请输入	设置
单体欠压保护:	2.70V	请输入	设置

均衡开关: Off

实时状态    主动均衡    参数设置

## 5. 参数设置

参数设置界面（参数可根据实际需求设置）

### 5. Parameter Setting

Parameter setting interface (parameters can be set according to actual needs)

