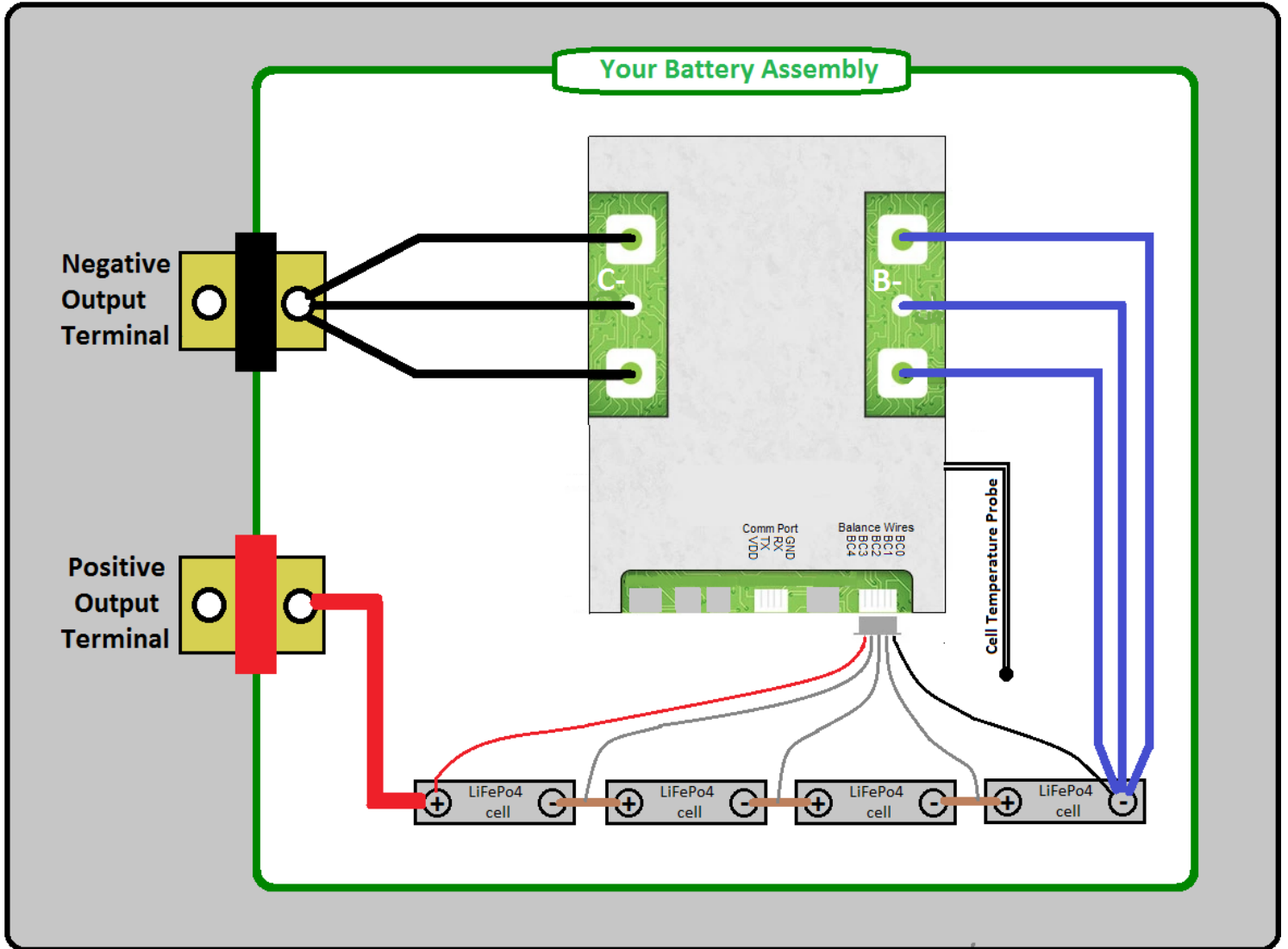


# Battery Management System For 4 cell LiFePo4 Batteries. 120A continuous rated current.

Assemble as shown below:



The BMS comes programmed for LiFePo4 cells.  
All parameters can be adjusted.

Changing the parameters is potentially dangerous, proceed with caution!

To view or change Parameters, there are 3 ways to connect to the BMS.

1. Bluetooth module to IOS app. The app is on the Apple app store, it is free to view operational data, but costs \$6 to view and change parameters. Search for "xiaoxiang bms" (see other side)
2. Bluetooth module to Android app. This application is free.
3. USB module to PC/desktop application. This application is free.

All documentation and software can be found at <https://github.com/FurTrader/OverkillSolarBMS>

Also check out the support forum at [Reddit.com/r/OverkillSolarBMS](https://www.reddit.com/r/OverkillSolarBMS)

# IOS app screenshots:

## These are the factory settings.

Verizon 1:04 PM 74%

Devices

Demo Device  
MAC: unavailable

xiaoxiang BMS  
MAC: A4:C1:38:A5:C1:28

searching for devices...

show demo device

info

Verizon 1:04 PM 73%

< Devices xiaoxiang BMS

Update Time 2020-03-03 13:04:33

Charge

100 %  
13.53 V  
99.99 of 100.00 Ah

Discharge

Power: 0 W

Alarms [0]

Temperature

Temp. sensor 1 24.1°C

Temp. sensor 2 150.0°C

Cells Δ: 0.015, min[4]: 3.378, max[3]: 3.393

1 3.381 V [BALANCING]

2 3.387 V [BALANCING]

3 3.393 V [BALANCING]

4 3.378 V [BALANCING]

Session values

max Volt: 14.44 V min Volt: 10.37 V

max Chg: 0.00 A max Dis: 0.00 A

max Power: 0 W

Data is logged only when connected to BMS

reset

BMS Infos

Manufacturer DGJBD

Device Name JBD-SP04S020-L4S-120A

Manufact. date Feb 24, 2020

Battery cycles 0

BMS overvoltage times 2

BMS undervoltage times 2

Charging low-temperature times 0

Charging over-temperature times 0

Charging overcurrent times 0

Discharge low-temperature times 0

Discharge over-temperature times 0

Discharge overcurrent times 0

Short circuit times 0

batt off batt on

config

< xiaoxiang BMS

BMS read

open configuration

save configuration

BMS write

Capacity configuration

Designed Capacity 1000... mAh

Cycle Capacity 80000 mAh

Full Chg. Voltage 3400 mV

End of Dischg. Volt. 3000 mV

Discharge Rate 0.2 %

80% Cap. Voltage 3350 mV

60% Cap. Voltage 3300 mV

40% Cap. Voltage 3150 mV

20% Cap. Voltage 3100 mV

Balancer configuration

Start Voltage 3400 mV

Delta to balance 30 mV

Balancer Enabled

Bal. only when charging

Function configuration

Switch enable if your BMS has additional Switch to control the protection board

Load Detect if on, you need to disconnect the load after short circuit to make output working again

LED Enabled for BMS with LED soldered on only. Turns them on

LED Cap. display SOC level on LED (5 Led - 100%)

PIN / BMS Name

BMS Name JBD-SP04S020-L4S-120A-B-U

PIN protect Set PIN1 Set PIN2

more about PIN usage: [Online Manual](#)

Barcode

Protections

	Trigger Value	Release Value	Delay [s]
Cell over voltage	3650 mV	3500 mV	2
Cell under voltage	2500 mV	3000 mV	2
Batt over voltage	14600 mV	14000 mV	2
Batt under volt.	10000 mV	12000 mV	2
Charge over curr.	130000 mA	32 s	10
Discharge over curr.	130000 mA	32 s	10
Charge over temp	65 °C	55 °C	2
Charge under temp	-1 °C	5 °C	2
Discharge over temp	75 °C	70 °C	2
Discharge under temp	-10 °C	0 °C	2

App Settings BMS Settings Current Cal. Voltage Cal. Notifications