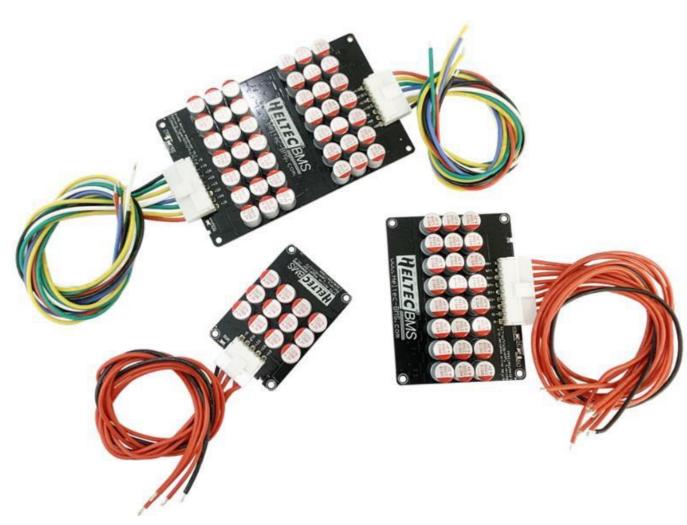


5A Active Balancer Manual

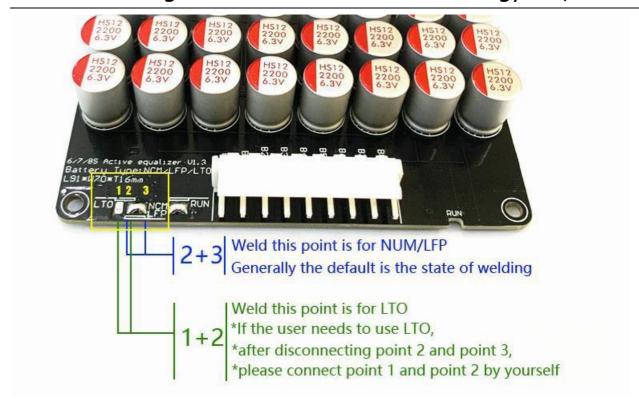
Website: www.Heltec-BMS.com



The New Version with connector all can be used on Lipo/Lifepo4/LTO, Except the 4S only design for lipo /Lifepo4

• See Below: How to make the balancer used on LTO





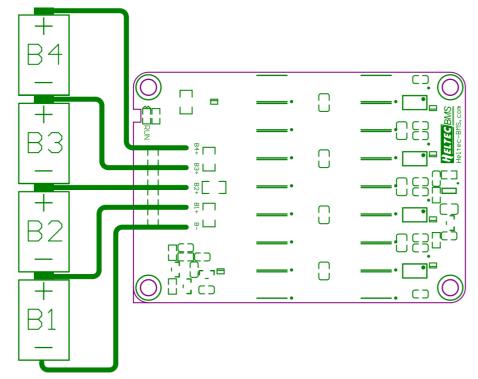
• Feture:

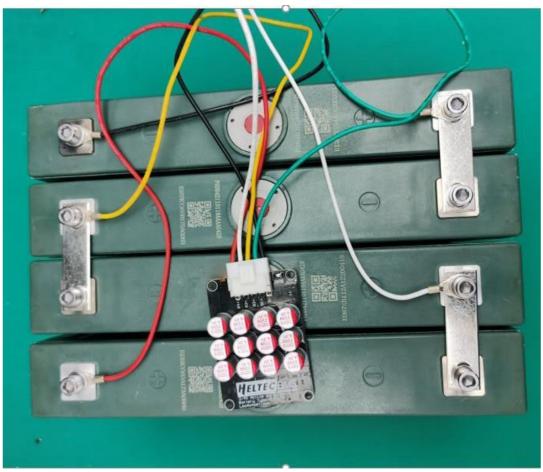
Technical index	Product model					
	45	6s	8s	145	175	215
Applicable string number	3S-4S	4S-6S	6S-8S	95-145	135-175	175-215
Applicable battery type	NCM/LFP/LTO					
Working range of single voltage	NCM/LFP: 3.0-4.2V LTO: 1.8-3.0V					
Voltage equalization accuracy	5mv (typical)					
Balanced mode	The whole battery participates in the active equalization of energy transfer at the same time					
Equalizing current	0.08V differential voltage 1A balance current. The differential voltage is bigger that the balance current is bigger. The maximum allowable balance current is 6A					
Under voltage protection sleep voltage	NCM/LFP:3.0V LTO : 1.8V					
Static working current	13mA	8mA	8mA	15mA	17mA	16mA
Product size (mm)	66*46*16	69*69*16	91*70*16	125*80*16	115*97*25	145*130*18
Working environment temperature	-10°C-60°C					
external power	No need for external power supply, relying on the internal energy transfer of the battery to achieve the whole group balance					



• **Connection:** The connection diagrams are all the highest strings drawn. You can connect as many strings as you actually need, and the rest can be left floating

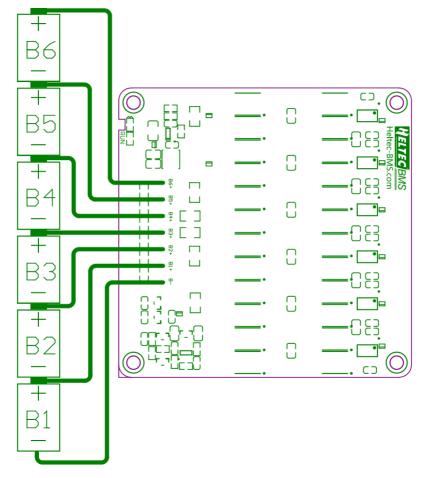
4S(3-4S)

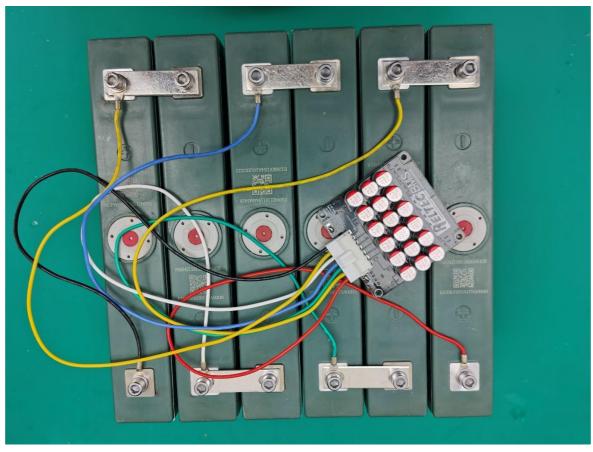






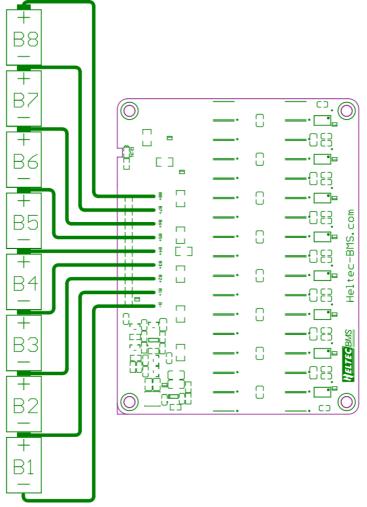
6S(4S-6S)

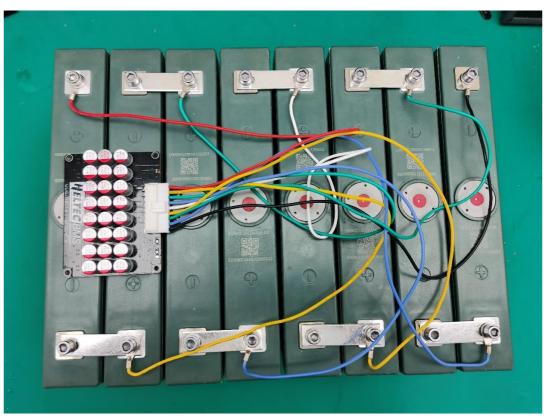






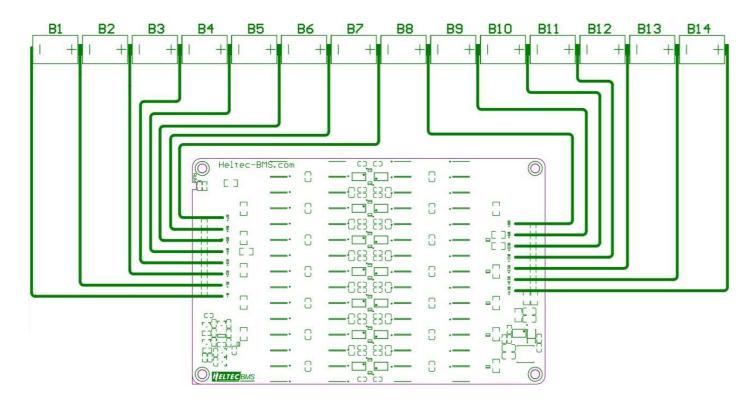
8S(6S-8S)



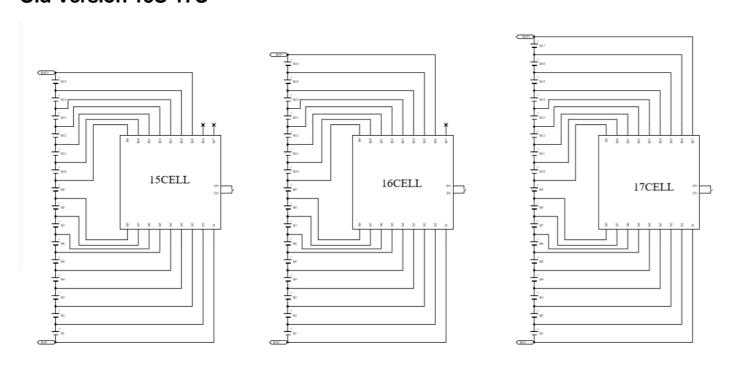




14S(9S-14S)

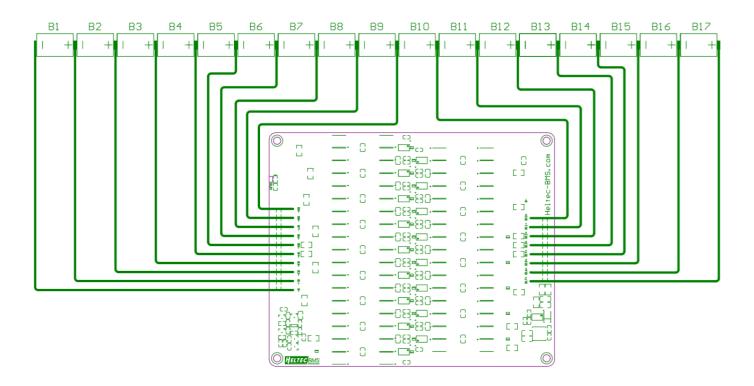


Old Version 15S-17S





New 17S (13-17S)



21S(17S-21S)

