

Overview:

The Battery Equalizer is used for the batteries which are connected in series to keep the voltage of batteries are equal when the batteries are charging or discharging ,when the batteries work in series connection ,the batteries voltage maybe will be not sdwe to the difference of each cell chemical composition and temperature .And each battery's self-discharge rate also different .So even the batteries not work ,their voltage of series batteries will be also different.These differences will cause battery lost balance,this means maybe one battery is overloaded aayb.nd the otherygsvfficiently charged .The voltage difference will be increased with the battery erpeated charge-discharge process ,this will result in premature failure of the batteries.

This battery equalizer is energy transfer type equalizer,it can compensatefor batteries with two sides ,The equalizer starts to work when there are 10mV between two batteries ,the current will flow from a higher vor3A ltage to low voltage ,eventually reach equilibrium ,It can connect with batteries system with 24 hours ,to keep the system energy balance automatically ,no need manual maintenance.

The Battery equalizer is suitable forlead -acid batteries (VRLA),lithium iron phosphate batteries (LFP),nickel-cadmium secondary batteries (Ni/CD),and nickel-metal hydride secondary batteries (Ni/MH),It starts work when the voltage higher than 2.4V , it means that this equalier can be used in a single cell battery range from 2.4V to 12V. One equalizer can connect 4 batteries once a time ,if battery less than the 4,the extra cable can be vacant(postive and negative terminal should be avoided).does not affect the equilibrium effects .The equalizer is not affacted with battery connection way ,no matter in series or in parallel ,both can work.

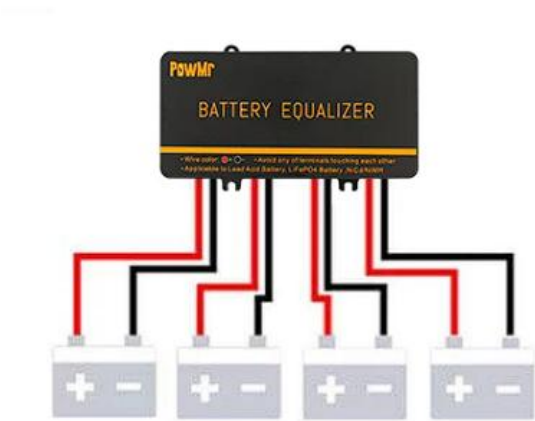
Specifications:

Model	BE24-N	BE48-N
Battery nominal voltage	2*12V	4*(2.4V/3.6V/6V/9V/12V)
Optimizing current	0-5A	0-10A
Qulescent current	<3mA	5mA(12V)1.2mA(2.4V)
Dimensions	78*78*28mm	69*129*28 mm
Protection	Reverse polarity protection	Reverse polarity protection
Low Voltage Disconnect	10V	1.8V

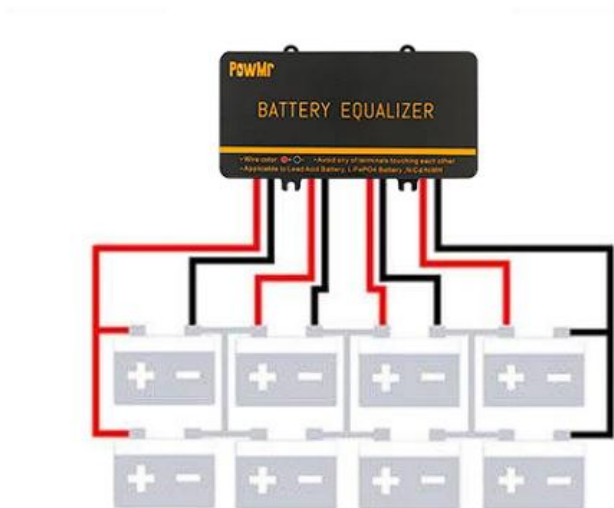
Connection:

- 1.Red cable connect positive/+pole,Black cable connect negative/-pole
- 2.connect the batteries as the pictures (connected in any order)
- 3.White Cable:Battery B negative pole or Battery A Positive pole(the pole which connected Battery A and Battery B in series)

Working Voltage	4x0.4/3.6/6/12V	Temperature	-7.6°F - 131 °F
Compensate Current	0-10A	Dimension	2.44 × 4.88 × 1.06 in
Standby Current	<1.8	Protection	reverse polarity protection



(4× 12V Batteries in Series)



(8 Batteries 2P4S Wiring)

Q: Support Battery Type

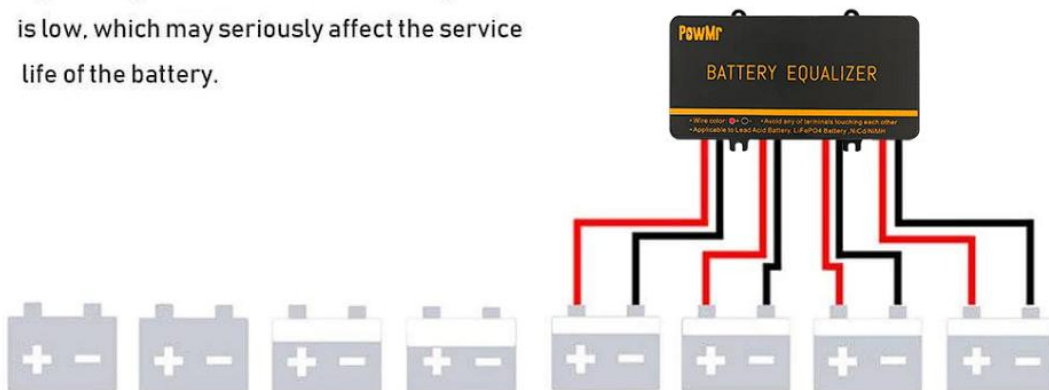
A: Lead-Acid batteries - Sealed=AGM,Flooded,Gel,Calcium
Lithium Battery.Nickel Cadmium Secondary Batteries,Nickel-metal Hydride
Secondary Batteries



Before using the equalizer, the voltage was unbalanced in the charging and discharging process. some battery has high voltage and some batteries voltage is low, which may seriously affect the service life of the battery.



After using the equalizer, all the battery voltage become balanced

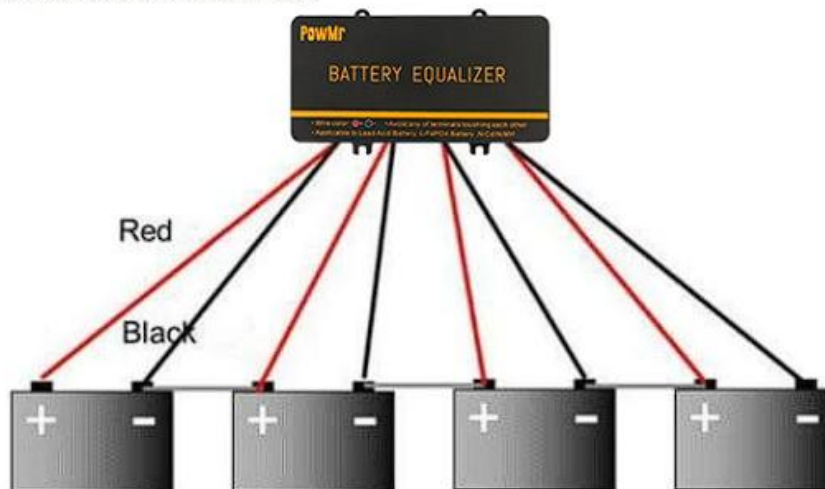


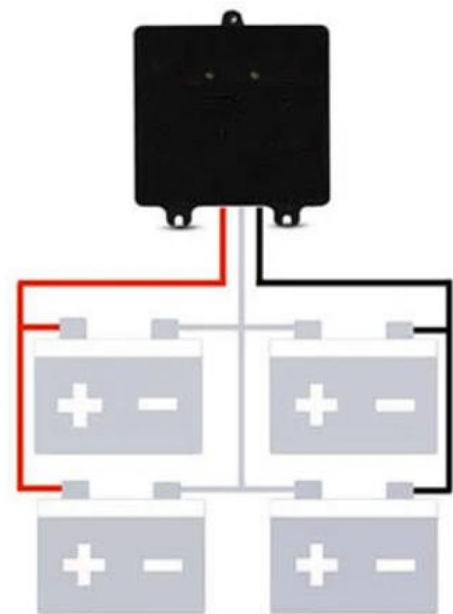
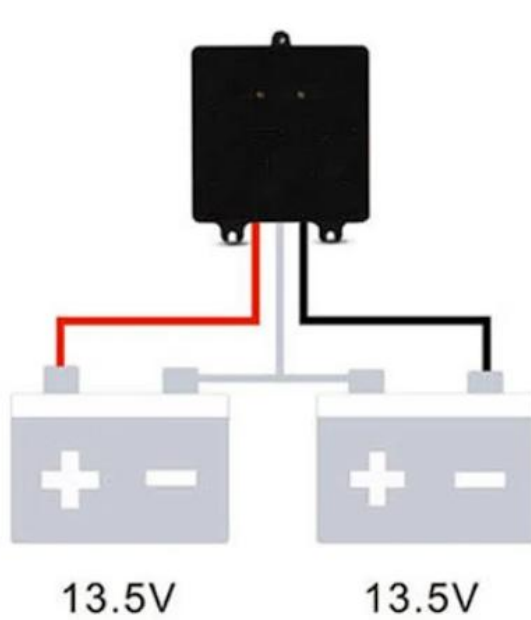
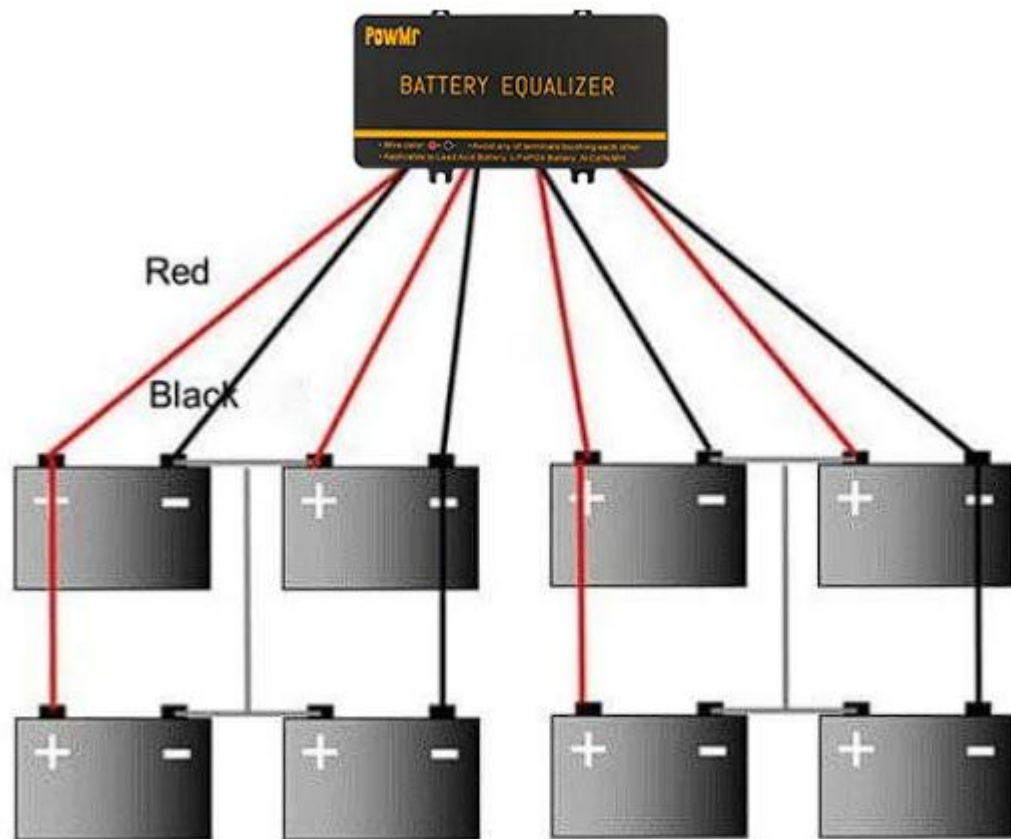
Connect it as the following order:

- 1.Red cable connect positive/+ pole. Black cable connect negative/- pole
- 2.Connect the batteries as the pictures

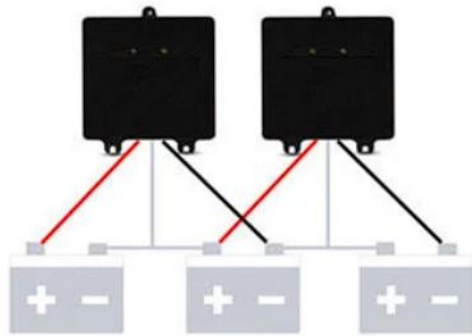
You can connect all + pole firstly,and then - pole to avoid short circuits.

- 3.If there are extra cables, avoid short circuits.

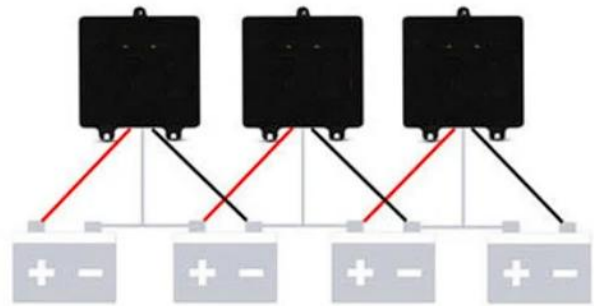




(24V battery Pack)



(36V battery pack)



(48V battery pack)

When Battery A or Battery B is lower than 10V

When Battery A is lower than 10V

LED A is ON LED B is OFF

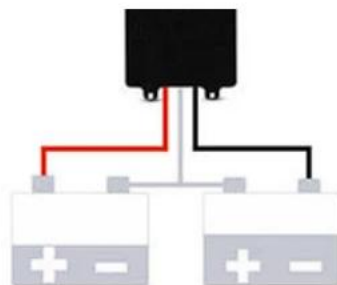
When Battery B is lower than 10V

LED B is ON ,LED A is OFF

When Battery A and Battery B are

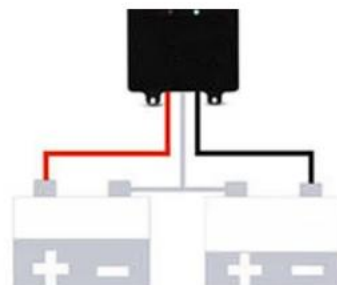
both lower than 10V , LED A and LED

B are both ON



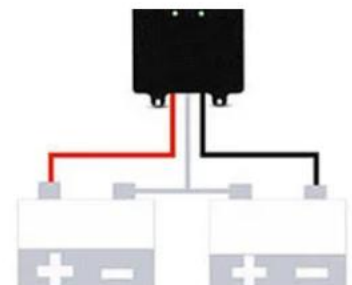
8.8V

12.2V



12.2V

8.8V



9.2V

8.8V

When Battery A or Battery B higher than 10V

Battery A Voltage is higher than

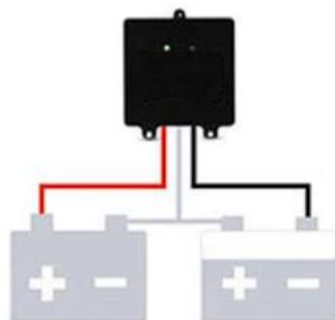
Battery B voltage is higher than

Battery A and Battery B are same voltage

Battery B. LED A is ON, LED B is OFF

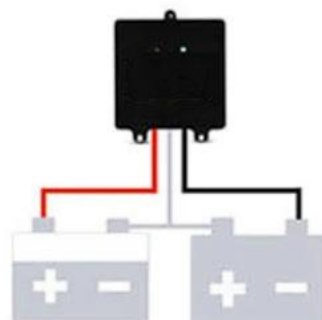
Battery A LED B is ON ,LED A is OFF

LED A and LED B are both OFF



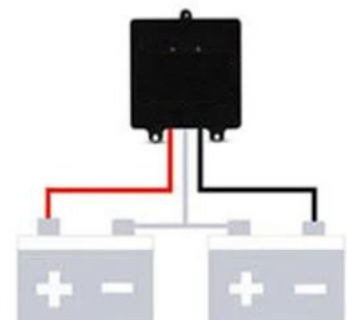
14.7V

12.3V



12.3V

14.7V



13.5V

13.5V