



**Battery Equalizer HA01
User Manual**

APPLICATION

Battery equalizer HA01 is used for the 12V lead-acid batteries which are connected in series to keep battery voltage balance.

When two or more in-series connected batteries are in charging/ discharging/free status. The battery voltages maybe become different. One battery voltage is high and one is low.

The battery equalizer will equalize/balance the battery voltage when it detect there are 20mV between two batteries. It will shunt current from one battery (the higher voltage one) to the other battery (the lower voltage one). Until their battery voltage almost becomes same. This will improve battery's performance and extent battery's life time.

Battery equalizer can be used for 24V, 36V, 48V and any other

1. piece for 24V system;
2. pieces for 36V system;
3. pieces for 48V system;

TECHNICAL DATA

| | |
|-------------------------|-----------------------------|
| Battery nominal voltage | 2 × 12V |
| Optimizing current | 0~5A |
| Quiescent current | <3mA |
| Dimensions | 70 × 70 × 27 mm |
| Protection | Reverse polarity protection |
| Low Voltage Disconnect | 10V |

LED INDICATOR

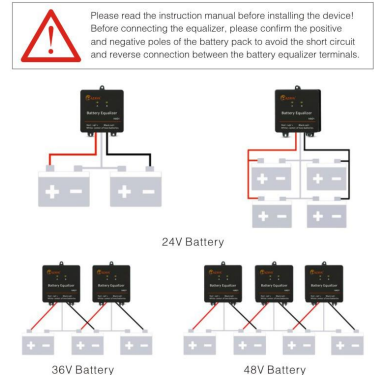
| | LED A | LED B |
|-------------------|-------|-------|
| U { A } = U { B } | Off | Off |
| U { A } > U { B } | Off | Flash |
| U { A } < U { B } | Flash | Off |
| U { A } < 10V | On | On |
| U { B } < 10V | On | Off |
| U { A/B } < 10V | On | On |

INSTALLATION

1. Black cable: negative/- pole

2. Red cable: positive/+ pole

3. White cable: Battery B negative pole or Battery A positive pole.
(The pole which connected Battery A and Battery B in series)



Ningbo Cinco Electronics Co.,Ltd

Add: 13-4 Room,Shunye Street 1#,Luotuo Zhenhai,
Ningbo city,Zhejiang Province,China
Tel: +86-574-26266608
Https://www.mazava.cn
E-mail:info@mazava.cn



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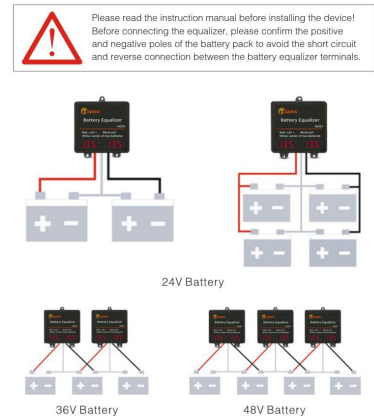
1. piece for 24V system;
2. pieces for 36V system;
3. pieces for 48V system;

TECHNICAL DATA

| | |
|-------------------------|-----------------------------|
| Battery nominal voltage | 2 × 12V |
| Optimizing current | 0~5A |
| Quiescent current | <30mA |
| Dimensions | 70 × 70 × 27 mm |
| Protection | Reverse polarity protection |
| Low Voltage Disconnect | 10V |

INSTALLATION

1. Black cable: negative/- pole
2. Red cable: positive/+ pole
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