



# Battery Equalizer HC01 User Manual

## APPLICATION

Battery equalizer HC01 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 N\*12V battery system.

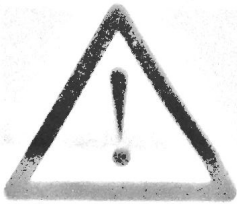
1. piece for 24V system;
2. pieces for 36V system;
3. pieces for 48V system;

## TECHNICAL DATA

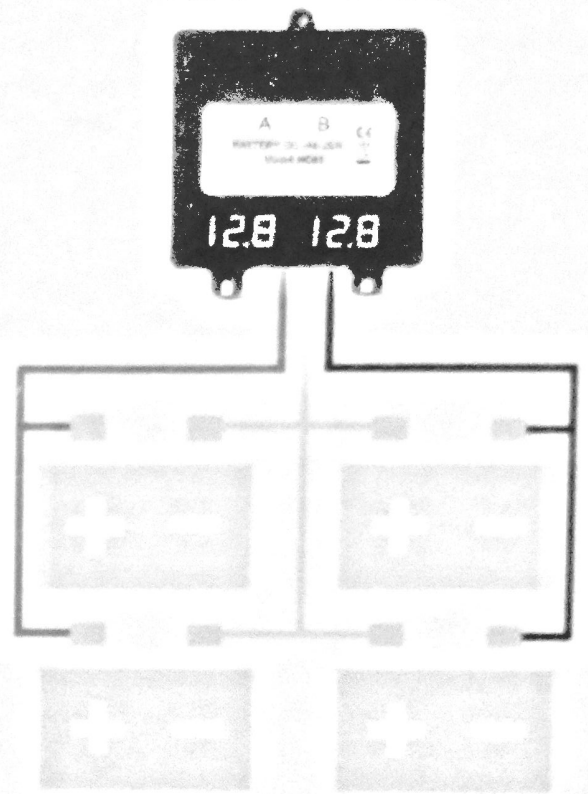
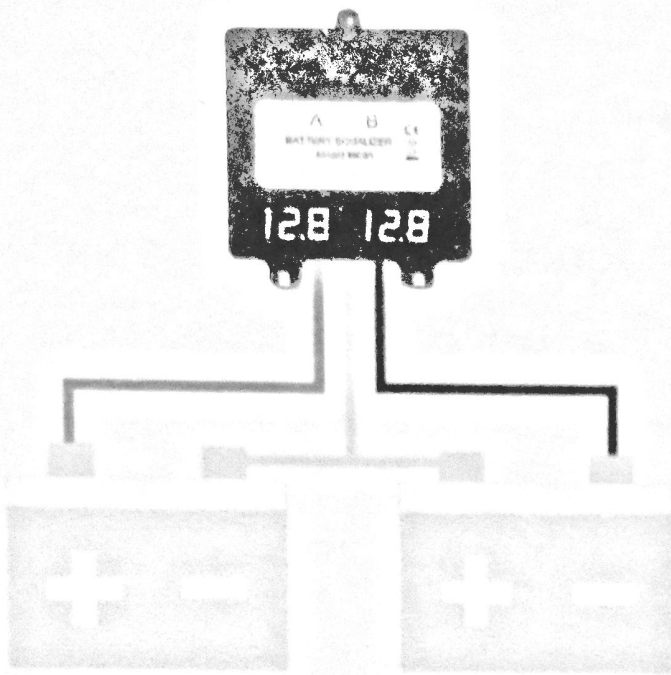
Battery nominal voltage	2 × 12V
Optimizing current	0–5A
Quiescent current	<30mA
Dimensions	70 × 70 × 27 mm
Protection	Reverse polarity protection
Low Voltage Disconnect	10V

## INSTALLATION

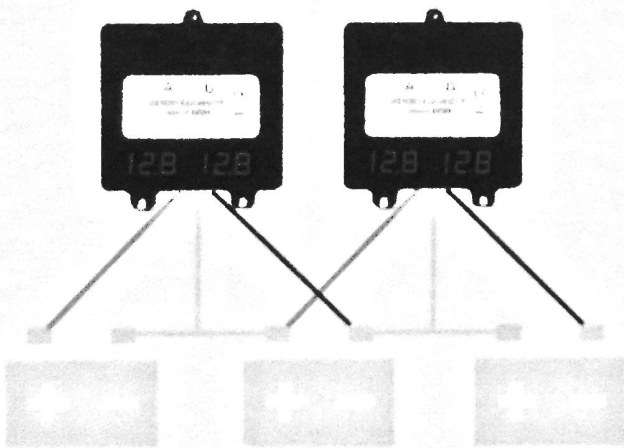
1. Black cable: negative/- pole
2. Red cable: positive/+ pole
3. White cable: Battery B negative pole or Battery A positive pole.  
(The pole which connected Battery A and Battery B in series)



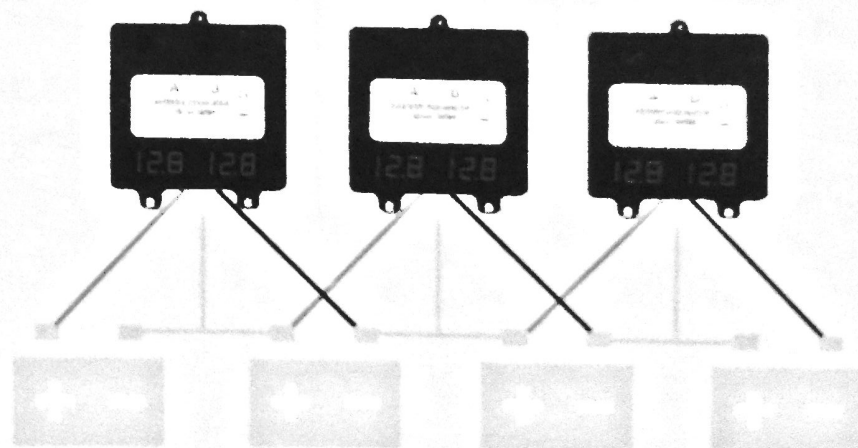
Please read the instruction manual before installing the device!  
Before connecting the equalizer, please confirm the positive and negative poles of the battery pack to avoid the short circuit and reverse connection between the battery equalizer terminals.



24V Battery



36V Battery



48V Battery

## FAQ OF HC01 BATTERY EQUALIZER

1. What is the working principle of the HC01 battery equalizer?

The HC01 battery equalizer is a capability-transferred equalizer. When the voltage difference between the batteries connected in series exceeds 20 mV, the battery equalizer starts to operate and the current flows from the higher voltage battery to the lower voltage battery. The maximum compensation current is 5A.

2. When does the battery equalizer start working?

When the difference between the two battery voltages is less than 20mV, the battery equalizer starts to work.

3. Can the HC01 battery equalizer be used when charging or Discharging?

Yes, the battery equalizer can be used during charging and discharging, and it can balance the battery voltage.

4. Can HC01 battery equalizer use lithium battery?

it could work for lead-acid batteries, lithium iron phosphate batteries, nickel-cadmium or nickel-metal hydride batteries .