

## PWM 20A TWIN BATTERY SOLAR CONTROLLER

### SAFETY INSTRUCTIONS

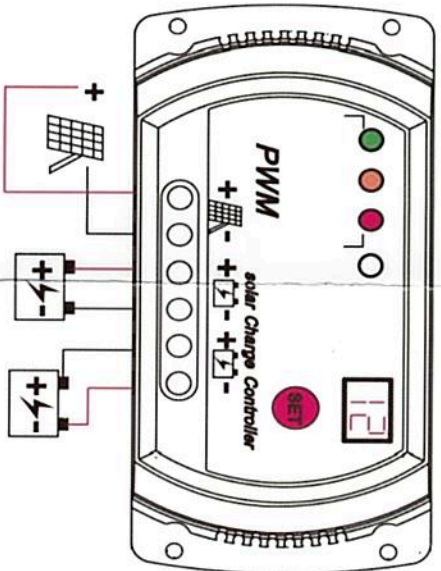
1. Make sure your battery has enough voltage for the controller to recognize the battery type before first installation.
2. The battery cable should be as short as possible to minimize loss.
3. The regulator is only suitable for lead acid batteries: OPEN, AGM, GEL it is not suited for nickel metal hydrid, lithium ions or other batteries.
4. The charge regulator is only suitable for regulating solar modules. Never connect another charging source to the charge regulator.

### PRODUCT FEATURES

1. Build-in industrial micro controller.
2. One-key setting, digital display, auto memory function.
3. Fully 4-stage PWM charge management.
4. Build-in open-circuit protection, reverse protection, over-load protection.
5. Reverse current protection ,low heat production.

### SYSTEM CONNECTION

1. Connect the battery to the charge regulator - plus and minus, it will show "1" if it detects 12V battery, "2" if it detects 24V battery.
2. Connect the photovoltaic module to the regulator - plus and minus.
3. Connect the consumer to the charge regulator - plus and minus.  
The reverse order applies when uninstalling!  
An improper sequence order can damage the controller!



### SETTING/SYSTEM MODE

Press the setting button to activate the mode display, press the button for 3 seconds, and select the desired mode.

display	mode	description
0	Charge only	Only use the charge function of the controller.

### TROUBLE SHOOTING

Situation	Probable cause	Solution
Charge LED not on when sunny	Solar panel opened or reversed	Reconnect
Power off	Battery too low/reverse	Check battery/connection

### TECHNICAL PARAMETER

MODEL	15939455
Batt voltage	12V/24V auto adapt
Charge current	20A
Max Solar Input	41V
Charge drop	<0.2V
Equalization	14.8V
Bulk	14.5V
Acceptance	14.2V PWM
Float	13.8V
Self-consume	<10mA
Operating temperature	-35--+60 °C

\*all red color voltage X2 while using 24V system

\*Product specifications are subject to change without prior notice