



## **User's Manual**

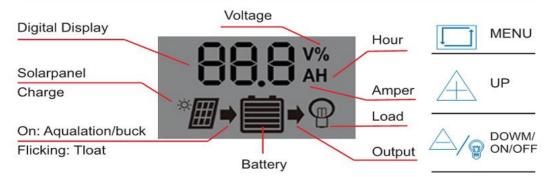
### SAFETY INSTRUCTIONS

- 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. This controller is suitable for lithium batteries and all kinds of lead-acid batteries (OPEN, AGM, GEL).
- 4. The charge regulator is only suitable for regulating solar modules. Never connect another charging source to the charge regulator.
- 5. The controller will be hot when running. Please note that the controller is installed on a flat, well ventilated surface.

#### PRODUCT FEATURES

- 1. Build-in industrial micro controller, all adjustable parameter.
- 2. Fully 3-stage PWM charge management.
- 3. Build-in short-circuit protection, open-circuit protection, reverse protection, over-load protection.
- 4. Dual MOSFET Reverse current protection, low heating disspation.
- 5. There are lithium battery and lead-acid battery switching function (at the battery type interface, 3 seconds into the switch settings), the default is lithium battery.

## LCD DISPLAY / KEY



MENU: Switch between different display or to enter / exit setting by long press.

UP: Press to increase value.

DOWN: Press to decrease value

### SYSTEM CONNECTION

- 1. Connect the battery to the charge regulator-plus and minus.
- 2. Connect the photovoltalc module to the regulator-plus and minus.
- 3. Connect the consumer to the charge regulator-plus and minus.

## LCD DISPLAY / SETTING



Main display



Browsing interface

2 Float voltage

Press MENU to browse different interface



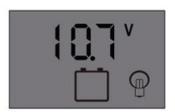
Set parameter



In interface 2-5, press and hold key [UP] for five seconds, restoring defaults. press and hold key [MENU] for five seconds, into manual settings, the number will flash at this time, press keys [UP] and [Down] to adjust parameter values, when finished, pressing key [MENU] for 5s to exit setting.



3 Discharge reconnect



Undervoltage protection

**6** Lithium battery





6 work mode

Attn:

- 1. press the[DOMN] button to ON/OFF load manully at main display.
- 2. The work mode is working as below.

[OH] Dusk to dawn [24H] load output 24 hours [1-23H] load on after sunset and close after setting hours.

# TROUBLE SHOOTING

Situation	Probable cause	Situation
Charge icon not on when sunny	Solar panel opened or reversed	Reconnect
Load icon off	Mode setting wrong	Set again
	Battery low	Recharge
Load icon slow flashing	Over load	Reduce load watt
Load icon slow flashing	Short circuit protection	Auto reconnect
Power off	Bettery too low reverse	Check bettery/connection