# **User's Manual**

## CMP-03-Series IP66 Solar Charge Controller

Introduction : The CMP-03-Series solar charge controller applies a microchip for intelligent control. The charging efficiency can be highly increased by using dual-mos charging circuit ,compared to normal diode for reserve current protection. The controller can extend the battery life with build-in 4-stage PWM charging program. It is equipped with various of protection function such as over-charge protection, over discharge protection, over-load protection, reverse current protection.

#### Notice: This product has light and time control.

**Light control**:When daylight starts to occur then the light source goes off. Meanwhile the Solar Panels will charge the batteries. when there is no sunlight the garden light will switch on. **Time control**:There is an eight hours time control,that means it will go off when the Lights automatically switch off after 8 hours.

#### 1.LED indicator and connection



	Green(charge)	Red ( discharge )
off	Solar panel disconnect /it is at night	Load output is off
on	Under PWM charge	Load output is on
Slow-flashing	Under float charge	Over load
Fast-flashing	Under buck charge	N/C

### 2.Installation

Connect the individual components to the symbols provided.

Observe the following connection sequence during commissioning:

1.Connect the battery to the charge controller - plus and minus

2.Connect the photovoltaic module to the charge controller - plus and minus

3.Connect the consumer to the charge regular - plus and minus

The reverse order applies when uninstall

An improper sequence order can damage the controller

\*\*\*\*\*\*\*\*\*Both LED will be flashing for 5 times when you first connect battery to the controller, this can be as a system start signal.Controller is broken if you can't see this.

#### ATTENTION

1.Controller will be broken if you don't follow the connection sequency

2. Please use big cable to reduce voltage drop on wire.

3. This controller is without short-circuit protection. Therefore, we strongly recommended to connect a fuse to the circuit.

#### 3. Daily maintenance

The controller is builded to be fully automatic.Please keep the controller out of water and dust after installation.No maintenance is necessary in normal condition.If the voltage is too low and not enough to start the controller(in some extreme weather),please disconnect the solar controllers and active the battery manually ,after that,connect the system again..

## 4. Specification

Model	CMP-03-5A
Max charge current	5A
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Over load	About 6A
Rated battery voltage	6V
Max solar panel input voltage	10.8V
Equalize voltage	7.4V
Constant voltage	7.1V
Float voltage	6.9V
LVD	5.6V
Discharge return	6.3V
Charging control	PWM 3 stage
Standby lost	2.8mA@6V
Min start voltage	4.5V
wire	20AWG*10cm
Size/weight	60x25x18mm/50g

Attn: 1.All voltage are for 12V system, pls time 2 if you are using 24V system

2.voltage tolerance 1%

3. Product specifications are subject to change without prior notice