

## JC Series Solar Controller User Manual

(This instruction can be applied to 6V/12V 3A Solar Controller)

### I. Product Introduction:

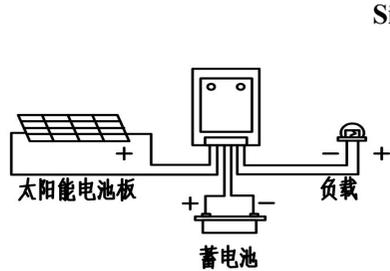
This product is a new generation intelligent controller integrate with charge and discharge function, it has strong stability and long lifetime. This series with battery voltage automatic identification function, PWM charging mode and comprehensive protection function, such as overcharge, over-discharge, over-current, short-circuit, reversed.

### II. Installation size & connection:

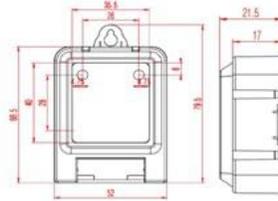
1. Installation environment: controller should be installed in a dry and ventilated place. 2. Installation size (kindly find as below) and notice. 3. Connection method (as shown in the figure) **A.** Firstly, connect battery correctly (positive on the left). **The Load of streetlight model will keeps long off not only during daytime, but also when it under voltage and over voltage.** Otherwise, pls check all the connection carefully. **B.** Secondly, connect solar panels properly (positive on the left), charge indicator LED began to light, into the charging status. Otherwise, please check all the connection carefully. **C.** At last, connect load, make sure connection is right (shown in bulb, positive on the left), lamp luminous. **The Load of streetlight model will keeps long off not only during daytime, but also when it under voltage and over voltage.** Otherwise, pls check all the connection carefully.

**Note:** Above connection steps ABC should be connect in order, otherwise, controller will be damaged.

**Connection diagram:**



**Size:**

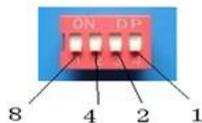


### III. LED Status indication:

LED	State	Function
Charge	Off	During night or no connect with battery
	Long bright	Battery charge in balance state
Power	Long bright (Green Led)	Controller have normal output
	Long off (Green Led)	Controller output protection

### IV. Setting Instructions:

This controller have inbuilt dial switch, number 8,4,2,1 represent time span. Customer should open outer shell before setting time. You can see dial switch in the right picture after opened outer shell. Kindly find following detail operation as follows: The following dial switch, 1, 2, 3, 4, as shown in the diagram means setting time, 8, 4, 2, 1. For example, if customers want to setting 6 hours, just to dial up button 2 and 3, operation like this, LED can light last 6 hours. If 11 hours needed, dial up button 8, 2, and 1, operation like this, LED will works 11 hours on (8, 4, 2, 1) up, controller will enter into led down, controller will come into home system mode, load will have contin



### V. Function:

1. The model integrate household type and street lamp type design in one controller. 2. The controller can be applied to 6V/ 12V battery system. 3. The controller has light control and time control (street lamp type). 4. The controller has many protective measures, such as overcharge, discharge, over current, short circuit, reversed. 5. The controller with precise design and high protective measures. 6. With three charging mode, Strong charging, equilibrium charging, floating three-step PWM control are included.

### VI. Safety advice:

1. The controller has reverse connection protection, but it is still strictly be prohibit to connection in reverse direction, this will also damage the load. 2. If battery is found doesn't work properly or doesn't work, kindly check all the circuit carefully. To connection solar panel is forbidden at this situation. Controller will be damaged, if both of solar panel and battery connection in reverse direction. 3. To avoid battery short circuit accidently at any time becused battery store up lots of energy. 4. Battery will produce some flammable gas when it charge fully, so, keep fires away, prevent explosion from this situation. 5. Please obey suggestions of the battery producer, avoid children to contact with it, prevent any accident happen.

### VII. Specifications

Model	JC0603/JC1203
Rated Voltage	6V/12V
Strong charging pressure	7.4/14.8V
Equilibrium charging	7.25/14.5V
Float charging pressure	6.85/13.7V
Under voltage	5.4V/10.8V
Under recover voltage	6.5/13V
Non-load current	≤6mA
Charging circuit voltage drop	≤0.2V
Discharge circuit voltage drop	≤0.1V
Maximum charging current	3A
Maximum load current	3A
Controller protection	overcharge, over-discharge, over-current, short-circuit, reversed
Charging Mode	PWM Charging Mode
Using elevation	≤5500m (more than 2000m should be used in lower power)
Working temperature	-20℃~55℃
Gross Weight (KG)	0.05KG
Net Weight (KG)	0.035KG
Product size (Length*Width*Height)	79.5mm*52mm*21.5mm
Protection level	IP22