

## Solar Lamp Light-adjusting Controller L-2415 USER MANUAL



Thanks for purchasing solar lamp light-adjusting controller which produced by our controller please read the instruction literally before use and keep it for reference in future.

Our controllers are denominated according to the following regulations. Please give clear indication when you place your orders with us, then we are able to provide you the products promptly and accurately.

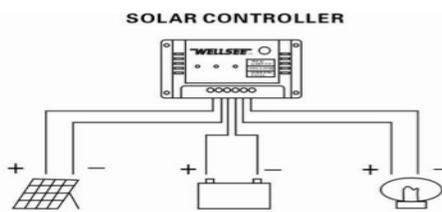
**L     24     15**  
 |     |     |  
 |     |     | \_\_\_\_\_ 15: Maximum current (A), 15= 15A  
 |     | \_\_\_\_\_ 24: = 24/12V automatically distinguish voltage  
 | \_\_\_\_\_ L: Solar street lamp controller,

### 1. Functions and Features

Solar lamp light-adjusting controller is controlled by micro- CPU, which can apperceive light of outside intelligently. It will start head lamp at dark, this controller could also be in charge of batteries charging as well as discharging. It will protect batteries by cutting off head lamps work automatically if the batteries voltage is ,low, and come into the condition of float-charge controlled by PWM automatically if the batteries are filles with electricity. It will cut off charging circuit inorder to protect batteries from discharging trough solar panel at dark. Moreover, the controller also has a perfect protection circuit to prevent itself from being damaged accidently.

### 2. Connection

**Connection:**



1.Be careful that this controller must be connected to linear loads, such as LED lamp, light-bulb and so on. 2.While installing the system, the controller must be connected to battery before connecting the loads or solar panel; avoid the power of solar panel from directly connecting to the loads. 3. Shut off the Load, press the Reset button making the controller

resume work, then connected the load after charge the battery; 4 If there is a problem with battery charge, you should increase the power of solar panel or change th battery.

### 3. Indicator Light

This controller has a red charge indicator LED light, a green load indicator light, and an orange battery power indicator light. The red indicator LED light (CHARGE) will sparkle when the batteries are being charged through solar panel. The green one (LOAD) will sparkle when the main light is lighted. Moreover, it works as an indication for check and setup as well. The indicator LED light for batteries voltage will be red if the voltage is low, and will be green if the batteries are filled with electricity. The indicator LED light is orange in a normal condition.

Color charging LED light	12V	24V	48V
Red LED light	$\leq 10.5$	$\leq 21$	$\leq 42$
Orange LED light	11.0-13.7	22-27.4	43.5-48
Green LED light	$\geq 13.7$	$\geq 27.4$	$\geq 54.8$

### 4. Button

The controller has a button SET, which is used to check and set working mode. You can press the button less than 2 seconds if you want to check it. If you want to set the working mode, please press the SET button for a while, until the mode of time-setting or light-adjusting appears.

### 5. Check an Setup

**Inquiry:** Press the SET button, meanwhile check the LOAD/LIGHT indicator light works. The controller is in a light-adjusting condition when the light sparkles for 2 seconds. The light to sparkle slowly one time suggests that the controller will work for 30 minutes, and it could flicker for 20 times at most, which means it will be working for 10 hours.

**Setup:** Press the SET button for a while, and the LOAD/LIGHT indicator LED light will sparkle 2 seconds later, each flash means 30 minutes working. That is you've fixed the time of strong light for 30 minutes, and the light will sparkle fast after sparkling slowly 20 times, which means the controller is in a light-adjusting condition.

### 6. Time-Fixed Mode

**Time-fixed:** The time of strong light can be fixed between 0.5 and 10 hours, the head lamp will be lighted at dark, and turn off according to the fixed time.

### 7. Model and Parameter

Model	L2415 10A
System voltage	12/24V Automatic distinguish voltage
Max charge current	10A
Max discharge current	10A
Charge off voltage (HVD)	14.4V/28.8V
Low Voltage Directive (LVD)	10.8V/21.6V
Low Voltage Restore (LVR)	11.8V/23.6V
Light operate	light control turn on + light control turn off
Light time control	light control turn on/off + time control turn on/off
Time control classification	0.5 hours started, half an hour of one grade, up to 10 hours
Output route	single bulb
Ambient temperature	-25°C ----- + 55°C
Safe degree	IP 22
Quiescent dissipation	24mA
Max loop voltage drop	350mV

