

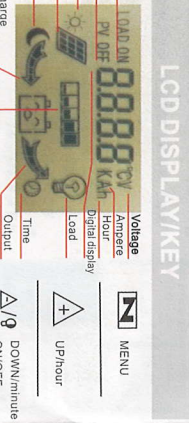
User's Manual

SAFETY INSTRUCTIONS

1. This controller is 12V/24V automatic adaptation, or another version 12/24/36/48/60V, manually set the appropriate battery charging mode. When installing for the first time, please make sure that the battery has enough voltage to start and automatically set the mode.
2. The battery cable should be as short as possible to minimize loss.
3. This controller is suitable for all kinds of lead-acid batteries (including open, sealed, gel and other batteries). **If you change lithium battery, you must be familiar with its battery characteristics, and you must set the charging parameters before you can use it.** For example, change 2V lithium battery, provide another charging mode, such as 1.5V, full protection, 12.5V, start charging voltage 11.5V when the battery drops.
4. The charge regulator is only suitable for regulating solar modules. Never connect another charging source to the charge regulator.
5. **The battery protection board must be provided when changing the lithium battery, and the requirements must be satisfied. It is strictly forbidden to charge directly without a protective plate, and it is strictly forbidden to recharge the lithium battery pack without permission.**

PRODUCT FEATURES

1. Industrial-grade master chip, 16 AD sampling accuracy, temperature, charging current, discharge current, accurate real-time display, power generation at a glance
2. Automatic focusing MPPT tracking charging, high charging efficiency, non-stop detection during charging, bidirectional focusing tracking.
3. Large-screen LCD display, adjustable charging and discharging parameters. Ultra-wide charge and discharge adjustable, as long as you understand the characteristics of the battery sets its corresponding charging parameters, you can change a battery. When the output is off, the time can be adjusted, which is more convenient (on the market, there is no joint adjustment).
4. A complete three-phase charge management, effectively protect the battery, the battery is more durable.
5. built-in overheating, overcurrent, short circuit, open circuit protection, reverse connection protection, when the fault is eliminated, the controller automatically recovers, does not damage the device.
6. bidirectional MOS tube anti-backflow circuit, high-power charging mode, ultra-low heat.
7. RS 0 solar charging DC plug, RS 0 DC output DC plug, convenient connection.



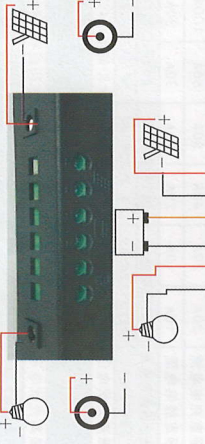
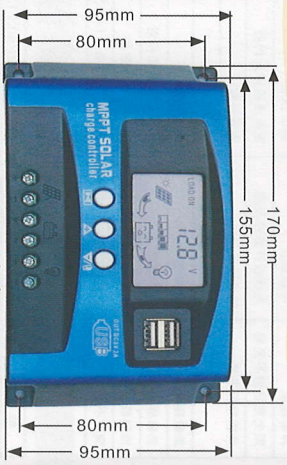
SYSTEM CONNECTION

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

Setting Description:

1. Main interface: Press the menu key, select the interface to adjust the corresponding parameters, and set the working status of the equipment.
2. Load working mode: Set manual control load output. Auto automatic light control mode: 00:58:00 continuous output.
3. Set real-time working status of 3.1V display battery voltage value load output current display 429.1°C, temperature display.
4. A solar charging flow shows that high current charging and charging arrows flow fast, and current flows slowly.
5. The do 0A output load current shows that the large current discharge charging arrow flows fast and the current flows slowly.
6. Displays the voltage value of the rechargeable battery, A/D automatic identification mode, low-voltage machine 12/24V, high-voltage machine 12V/24V/36V/48V/60V

The reverse order applies when disinstalling!
An improper sequence order can damage the controller!



DISPLAY/SETTING

1. main display
2. float voltage
3. discharge reconnect
4. discharge stop
5. Work parameter display
6. Set rechargeable voltage
7. Set temperature display
8. Set manual control mode
9. Set real-time output time
10. Always output

TROUBLE SHOOTING

Situation	Probable cause	Solution
Charge icon not on	Solar panel opened or reversed	Reconnect
When sunny	Mode setting wrong	Set again
Load icon off	Battery low	recharge
Load icon slow flashing	Over load	Reduce load watt
Load icon fast flashing	Short circuit protection	Auto reconnect
Power off	Low Battery voltage /reverse	Check battery/connection
Suddenly not charging	Solar energy disappears, only arrows?	Overheat protection, self-recovery of temperature drop

TECHNICAL PARAMETER

MODEL	BL912A	BL912B	BL912C	BL912D	BL912E	BL912F
Charge current	20A	30A	40A	50A	60A	100A
Discharge current	10A	10A	20A	20A	30A	30A
Equalization	B01 Lithium	B02 Gel	B03 Gel	B03 Flood	B03 Flood	B03 Flood
Max. Solar Input	12.2V/24.4V	14.2V/28.4V	14.2V/28.4V	14.6V/29.2V	14.6V/29.2V	14.6V/29.2V
Equalization	B01 Lithium	B02 Gel	B03 Gel	B03 Flood	B03 Flood	B03 Flood
Equalization	36V/49V	42V/56V	44V/58V	44V/58V	44V/58V	44V/58V
Max Solar Input	54V solar panel for 36V battery and 72V solar panel for 48V/60V					
Equalization	B01 Lithium	B02 Gel	B03 Flood	B03 Flood	B03 Flood	B03 Flood
Equalization	61V	71V	73V	73V	73V	73V
Max solar input	60V	60V	60V	60V	60V	60V
12V Float	14.2V (default, adjust table)	12.0-11.5.0V				
12V Discharge stop	12.5V (default, adjust table)	9.0-11.3.0V				
12V Discharge stop	10.5V (default, adjust table)	11.0-11.3.0V				
24V Float	28.4V (default, adjust table)	24.0-22.0.0V				
24V Discharge stop	19.0V (default, adjust table)	18.0-22.0.0V				
24V Discharge reconnect	22.0V (default, adjust table)	22.0-26.0.0V				
36V Float	42.0V (default, adjust table)	36.0-45.0.0V				
36V Discharge stop	30.0V (default, adjust table)	27.0-42.0.0V				
36V Discharge reconnect	38.0V (default, adjust table)	36.0-42.0.0V				
48V Float	56.0V (default, adjust table)	48.0-60.0.0V				
48V Discharge stop	40.0V (default, adjust table)	36.0-44.0.0V				
48V Discharge reconnect	50.0V (default, adjust table)	48.0-56.0.0V				
60V Float	71.0V (default, adjust table)	60.0-75.0.0V				
60V Discharge stop	50.0V (default, adjust table)	45.0-65.0.0V				
60V Discharge reconnect	63.0V (default, adjust table)	60.0-70.0.0V				
Self-consume	<10mA					
USB output	5V/2A Max					
Operating temperature	-10~60°C					
Size/Weight	170*92*45mm/450g					

Device number binding APP functions

6PRS machine APP can only be used in China:
Bluetooth/WiFi global use

1. Click the device number or APP use location in the software APP page.
2. In the software APP page, click the device number or APP use location in the software APP page.
3. After the input is complete, click the bind button to bind.

example 13800000000
password: 123456

BL-912V APP INSTALLATION PROCESS



1. Scan the QR code on your Android phone to enter, or search for "Rubiube Cloud Control" in the app store to download and install. <https://fir.sdzlzl.com/514b> Download and install the software, enter the installation password 123456
2. The mobile phone scans the QR code of the machine, adds the device, and enters the device name to facilitate multi-device and multi-project operations.
3. Apple mobile phone installation
4. <https://apps.apple.com/cn/app/%E8%93%9D%E8%92%8A-%E4%B4%A1%E6%8E%AT/id1560688215> Search for "Rubiube Cloud Control" installation in the appstore.

Memory and monitoring of daily power generation

4. Working status and modification interface

1. APP interface description

Instructions for remote control APP

The following refers specifically to Bluetooth/WiFi connection and operation

The device is equipped with the network, and the mobile phone Bluetooth is turned on to connect with the controller. Rubiube mobile phone, enter the password and press "Confirm". When the machine is only connected to Bluetooth, it can also be used for short-distance APP operation with the machine through Bluetooth connection for remote control, mobile phone WiFi or flow card for remote control.

1. The name can be modified to facilitate management.
2. Data collection corresponds to 5, which displays
3. Parameters, and automatically memorize them after modification.
4. Real-time power generation collection and display, daily sunlight utilization, and clear records of power generation.

2. Solar controller remote control adjustment

Use battery type settings: 1. lithium battery 2. gel battery 3. lead-acid battery

It is effective in timing output mode. Turn off the light by the hour after no sunlight, the range is 0-23 hours. Effective in timing output mode, turn off the light by minute after no sunlight, the range is 0-59 minutes. Set the battery's full voltage value to prevent overcharge. Set the battery's full voltage value to prevent overcharge. Set the battery's full voltage value to prevent overcharge. Set the battery's full voltage value to prevent overcharge. Set the battery's full voltage value to prevent overcharge.

Product specifications are subject to change without prior notice

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