

User's Manual

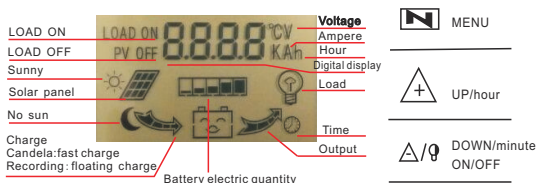
SAFETY INSTRUCTIONS

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. The controller is applicable to various lead-acid batteries (including openings, seals, gels, etc.). If you charge other batteries, you must be familiar with the battery characteristics and set the appropriate charging parameters.
For example: charge 12V lithium battery, inhibit the output protection setting 9.5V, full of protection 12.2V, 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..

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 set its corresponding charging parameters, you can charge a battery. When the output is off, the time can be adjusted, which is more convenient (on the market, there is no point 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. R5.0 solar charging DC plug, R5.0 DC lamp output DC plug, convenient connection.

LCD DISPLAY/KEY



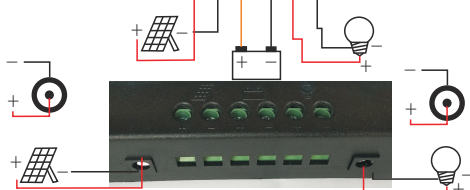
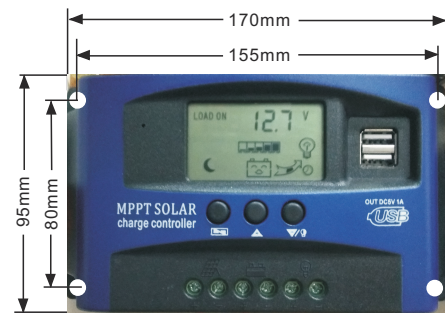
MENU: Switch between different display or to enter.
UP : press to increase value.
DOWN: Press to decrease value.

SYSTEM CONNECTION

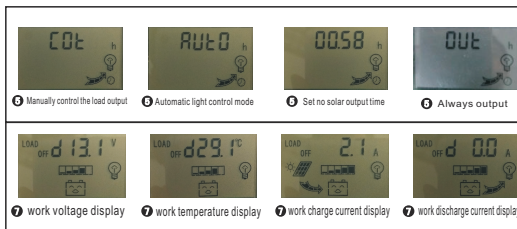
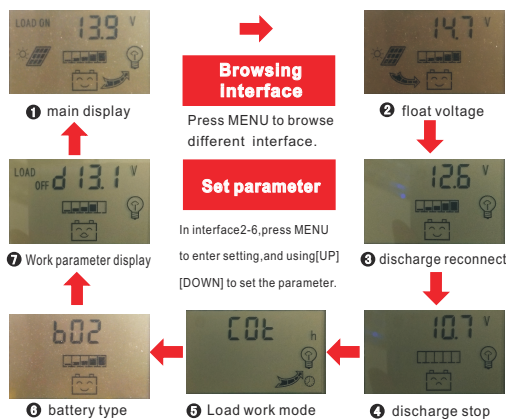
1. Connect the battery to the charge regulator-plus and minus.
2. Connect the photovoltaic module to the regulator-plus and minus.
3. Connect the consumer to the charge regulator-plus and minus.

The reverse order applies when deinstalling!

An improper sequence order can damage the controller!



DISPLAY/SETTING



Setting Description:

1. the main interface Press the menu button, select the interface to adjust the corresponding parameters, set the working status of the device.
2. Working mode of the load Cot manually controls the load output Auto automatic light control mode 00:58 Sets no solar light output time.
3. Set real-time working status d13.1V display battery voltage value load output current display.
d29.1°C temperature display
d2.1 A solar charging flow shows that high current charging and charging arrows flow fast, and current flows slowly.
The d0.0A output load current shows that the large current discharge discharge arrow flows fast and the current flows slowly.

TROUBLE SHOOTING

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

TECHNICAL PARAMETER

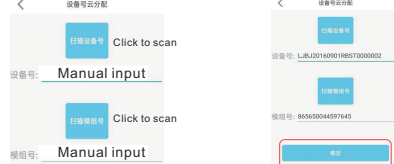
MODEL	BL912A	BL912B	BL912C	BL912D	BL912E
Batt voltage	12V/24V auto adapt				
Charge current	20A	30A	40A	50A	60A
Discharge current	10A	10A	20A	20A	30 A
Solar panel voltaget	12V with 18V solar panel, 24V with 36V solar panel				
Full voltage	lithium battery		Bo2 Gel		Bo3 flood
	12.2V		14.2V		14.6V
Float	13.7V(default,adjus table)				
Discharge stop	10.7V(default,adjus table)				
Discharge reconnect	12.6V(default,adjus table)				
Self-consume	<10mA				
USB output	5V/2A Max				
Operating temperature	-35~+60℃				
Size/Weight	170*92*45/450g				

* The red font marking voltage only corresponds to 12V system, if using 24V system, it is twice the parameter value of 12V.

Device number binding instructions

The non-Chinese version is a GPS-specific chip working method, and the product does not have this function (only available in the customized version)

1. Click the device number cloud allocation option in the software My page:
2. On the assignment interface, click Scan Device and Device Number, shoot a QR code or manually enter the device number or module number:
3. After the input is complete, click the bind button to bind:



BL-912V APP INSTALLATION PROCESS



1. Scan the QR code on your mobile phone and enter https://www.japptore.com/cyny to download and install the software. Enter the installation password 86780350. Apple users can search for "zencloud" in the AppStore
2. The mobile phone scans the QR code of the machine, adds the device, and enters the device name to facilitate the operation of multiple devices and multiple projects.
3. Support one mobile phone to monitor multiple devices, or multiple mobile phones to monitor one device, which is convenient for management operation and improves work efficiency.
4. Click Install Register to login. After successful registration, enter the interface and click Add Smart Module



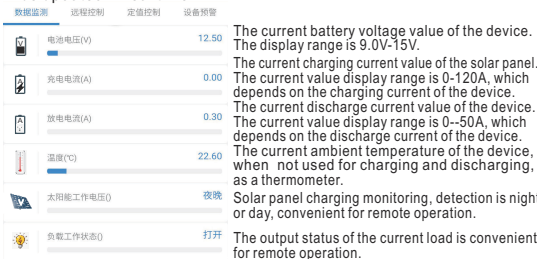
- a. Register; Login
- b. Add Smart Module
- c. Customize corresponding module icon name



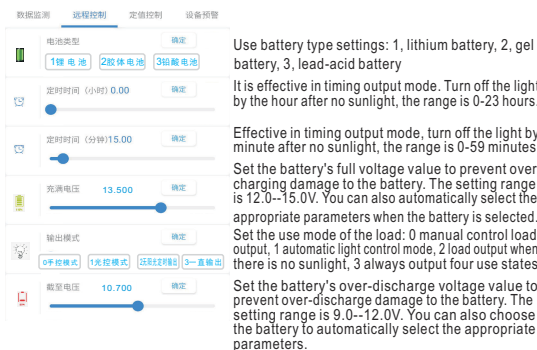
- d. Click on the module you just added
- e. Click on the house symbol in the upper right corner
- f. Scan the corresponding QR code on the controller and enter the custom device name

REMOTE CONTROL MONITORING AND APP OPERATION AND ILLUSTRATION

1. When the solar controller is powered on, the corresponding data can be updated in real time



2. Solar controller remote control adjustment



* Product specifications are subject to change without prior notice.