User's Manual (B version)

SAFETY INSTRUCTIONS

- 1. Make sure your battery has a high enough voltage for the controller to identify the battery type before the first installation.
- Install the controller as close to the battery as possible to avoid voltage drop caused by too long wire, which will affect the normal voltage judgment of the autioment.
- 3. This controller is only applicable to all kinds of lead-acid batteries (including Open type, VRLA, GEL, etc.), do not charge other batteries (including lithium batteries, NiMH batteries, etc.).
- 4. This controller can only use PV panel as the charging power, do not use DC or other power as the charging power.

PRODUCT FEATURES

- 1. Industrial level master chip is adopted.
- 2. Large screen, LCD display, adjustable charging and discharging parameters.
- 3. Complete 3-stage PWM charging management.
- Built in over-current protection, short circuit protection, open circuit protection and reverse connection protection are all self recovery type, without damaging the controller.
- 5. Dual MOS anti back flow circuit, ultra-low heat output



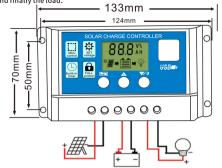
Page up: in the parameter setting interface, press once to increase the parameter by one gear.

Page down: there are two functions: 1. In the parameter setting interface, press once to move the parameter up and down. 2. Turn load off or on.

SYSTEM CONNECTION

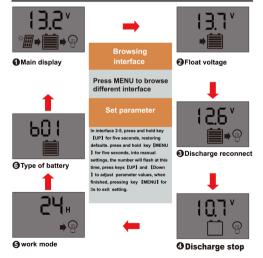
- Connect the positive and negative terminals of the battery with the controller as shown in the diagram, and the controller will automatically detect the battery voltage.
- 2. After the load is closed. Connect the positive and negative terminals of the load with the controller as shown in the diagram, pay attention not to reverse connection, and open the load after connecting.

Connect the solar panel with the controller as shown in the diagram.
Wire removal standard: first remove the solar panel, then the battery, and finally the load.



Warning: Any operation that does not comply with the operation standards in this menu, will have no relation to the quality of this product.

LCD DISPLAY / SETTING



Setting of light control delay mode: 24h ON mode by default

24h:Normal working mode of the load, no time limited, manually turn On/Off the DC output the load

00h: There is no need to set parameters. By default, The DC output for load is automatically turned off when there is sunlight, and turned on automatically when there is no sunlight.

1-23h:Turn off the load according to the set time.

Setting: Press the mune key select the figure(5),long press the menu key for about 3 seconds, and the screen will flash. Press the up key to select (24h / 00h / 01h). Select the mode according to the demand, it will stay for about 3 seconds and then return to the main interface automatically.

TROUBLE SHOOTING

Abnormal situation	Possible causes	Methods of solution
Sunny but not charged	Open circuit or reverse connection of PV panel	Reconnect the PV panel
Load icon slowly flash	Mode setting wrongly	Reset
Load icon fast flash	Short circuit protection	
Controller is not on	Battery voltage too low or reversed	Replace the battery / check the reverse connection

TECHNICAL PARAMETER

Model	YJSS10	YJSS20	YJSS30	
System volt	12V / 24V auto adapt			
Rated charging current	10A	20A	30A	
Rated discharge current	10A	10A	10A	
Max solar voltage	12V max solar current 23V;24V max solar current 46V			
Charging completed volt	b01 Sealed	b02 Gel	b03 Flood t	
	14.4V	14.2V	14.6V	
Floating charging volt	13.7V(adjustable:12.7V~15V)			
LVD	10.7V(adjustable:9V~11.3V)			
LVR	12. 6V(adjustable:11. 5–13V)			
Standby current	<10mA			
USB output	2 USB Output;5V/2A(MAX)			
Operating temperature	-35~+60℃			
Size/Weight	133*70*35mm / 132g			

^{*}The voltage marked in red font only corresponds to 12V system, if using 24V system, please x2

^{*}Product rules are subject to change without notice.