# **User's Manual**

### SAFETY INSTRUCTIONS

- 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.
- This controller is suitable for all kinds of lead-acid batteries (OPEN, AGM, GEL) and lithium batteries.
- The charge regulator is only suitable for regulating solar modules. Never connect another charging source to the charge regulator.

### PRODUCT FEATURES

- 1. Build-in industrial micro controller, all adjustable parameter.
- 2. Fully 3-stage PWM charge management.
- Build-in short-circuit protection, open-circuit protection, reverse protection, over-load protection.
- 4 Dual MOSFET Reverse current protection, low heating disspation.
- 5. With memory function, the parameters of lithium battery can be set up.

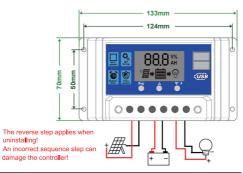
# Digital Display Voltage Voltage Hour Solarpanel Charge On: Aqualation/buck Flicking: Tloat Battery Voltage MENU MENU MENU MENU Output MENU Output DOWM ON/OFF

MENU: Switch between different display or to enter / exit setting by long press. UP: Press to increase value.

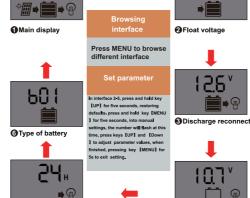
DOWN: Press to decrease value

## SYSTEM CONNECTION

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



### LCD DISPLAY / SETTING



### Attn:

(3) work mode

1. press the[DOMN] button to ON/OFF load manully at main display.

O Undervoltage

protection

2. The work mode is working as below.

[OH] Dusk to dawn [24H] load output 24 hours [1-23H] load on after sunset and close after setting hours.

### TROUBLE SHOOTING

Situation	Probable cause	<b>Situati</b> Reconn	
Charge icon not on when sunny	Solar panel opened or reversed		
Load icon off	Mode setting wrong	Set aga	
	Battery low	Recharç	
Load icon slow flashing	Over load	Reduce I	
Load icon slow flashing	Short circuit protection	Auto rec	
Power off	Bettery too low reverse	Check be	

### TECHNICAL PARAMETER

MODEL	YJSS-10		YJSS-20		Υ	JSS-
Batt voltage	12V / 24V auto adapt					
Charge current	10A		20A			30 <i>A</i>
Discharge current	10A		10A		_	104
Max Solar Input	<41V					
Equalization	b01 sealed	b	02 Gel	b	0:	
	14.4V	1.	4.2V	1.	4.	
Float	13.7V (defaults, Adjustable range12.7-15V)					
Undervoltage protection	10.7V (defaults, Adjustable range9-11.3V)					
Disstarge reconnect	10.7V (defaults, Adjustable range11.5-13V)					
Standby current	< 10mA					
USB output	5V /2A Max					
Operating Temperature	-35~+60℃					
Size / Weight	133*70*35mm/140g					

### LITHIUM CHARGING BATTERY SETTING

- 1.Protect 9V, lower than 9V and not allow discharge 2.Full of 12.1-12.6V, the battery is full of voltage
- 3.Floating charge 13.5V, when the solar panel 18V, that is, sup-erimposed 1V, see the display voltage 13.5V, in fact the battery is in the state of 12.5V, at this time the controller is intermittently charged to the battery, but also floating charge, will not damage the battery, and can maximize the saturation battery.
- \* all red color voltage X2, X4w hile using 24V sys
- \* Product specifications are subject to change without

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