# User's Manual

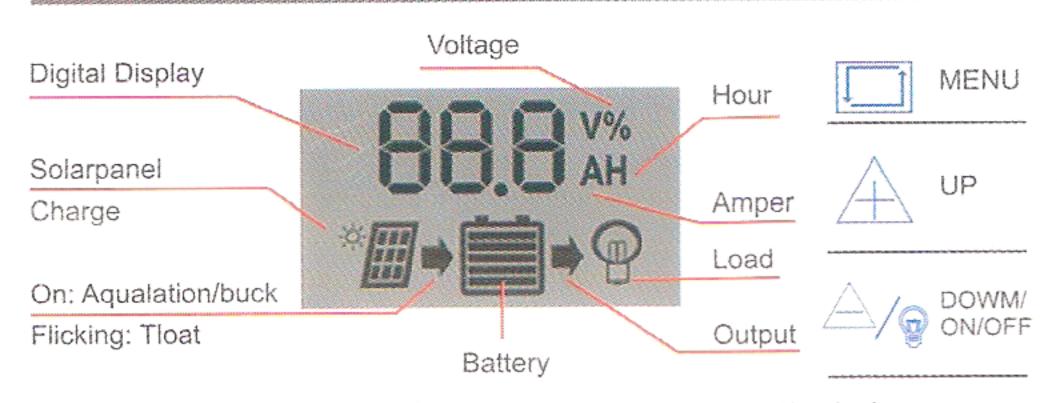
# SAFETY INSTRUCTIONS

- 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 regulator is only suitable for lead acid batteries : OPEN, AGM, GEL. It is not suitable for nickel metal hydride, lithium ions or other batteries.
- 4. 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.
- 2. Large LCD display, all adjustable parameter.
- 3. Fully 3-stage PWM charge management.
- 4. Build-in short-circuit protection, open-circuit protection, reverse protection, over-load protection.
- 5. Dual MOSFET Reverse current protection, low heating disspation.

# LCD DISPLAY / KEY



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

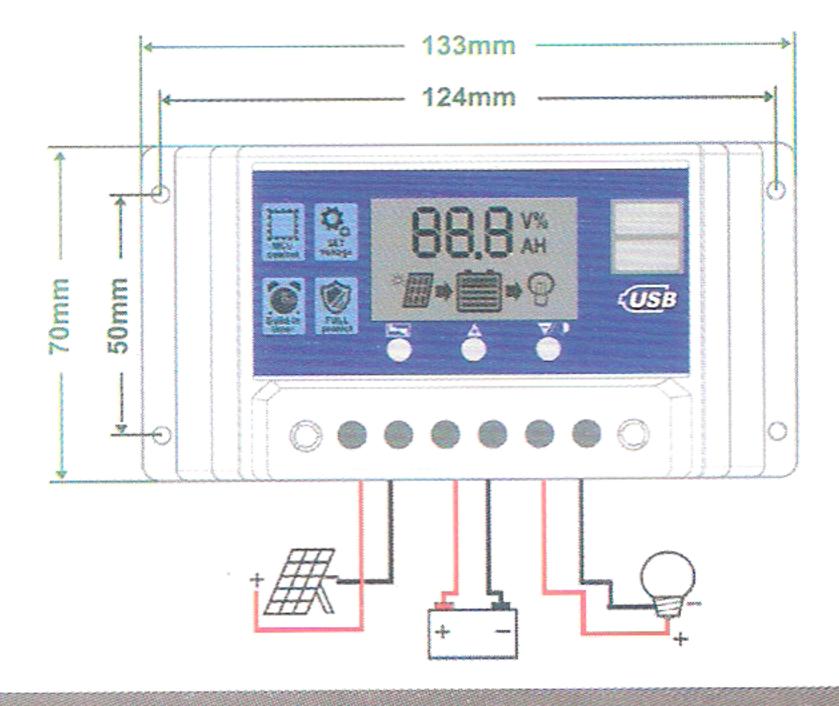
Press to increase value. : Press to decrease value

# SYSTEM CONNECTION

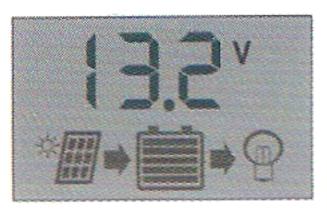
- 1. Connect the battery to the charge regulator-plus and minus.
- Connect the photovoltalc module to the regulator-plus and minus.
- Connect the consumer to the charge regulator-plus and minus.

The reverse step applies when uninstalling!

An incorrect sequence step can damage the controller!



### LCD DISPLAY / SETTING



**Main display** 



Browsing interface

Press MENU to browse different interface

Set parameter

In interface 2-5, press and hold key

[UP] for five seconds, restoring

I for five seconds, into manual

defaults, press and hold key [MENU

settings, the number will flash at this

time, press keys [UP] and [Down

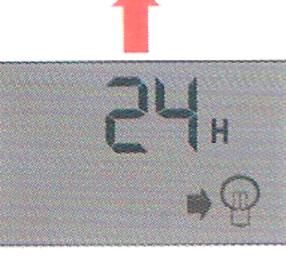
I to adjust parameter values, when

finished, pressing key [MENU] for

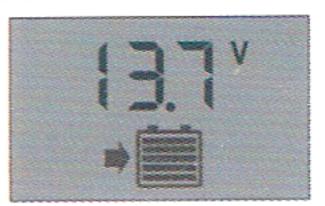
5s to exit setting.



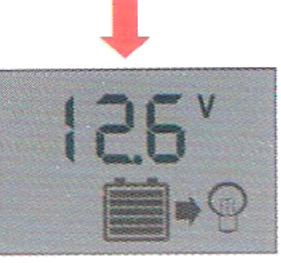
Type of battery



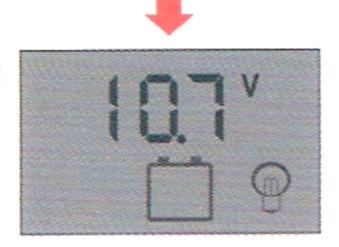
(a) work mode



Ploat voltage



Object
Discharge reconnect



O Discharge stop

#### Attn:

- press the[DOMN] button to ON/OFF load manully at main display.
- 2. The work mode is working as below.

load output 24 hours

load on after sunset and close after setting hours.

Dusk to dawn

# TROUBLE SHOOTING

Situation	Probable cause Situation		
Charge icon not on when sunny	Solar panel opened or reversed	Reconnect	
Load icon off	Mode setting wrong	Set again	
	Battery low	Recharge	
Load icon flashing	Over load	Reduce load watt	
	Bettery too low reverse	Check bettery/connection	

#### TECHNICAL PARAMETER

MODEL	YJSS10		YJSS20		YJSS30	
Batt voltage	12V / 24V auto adapt					
Charge current	10A		20A		30A	
Discharge current	10A		10A		10A	
Max Solar Input	12V system < 25V / 24V system < 50V					
Equalization	B01 sealed B02 Gel 14.4V 14.2V		B03 flood 14.6V			
Float	13.7V (defaults, adjustable range12.7-15 V)					
Discharge stop	10.7V (defaults, adjustable range9-11.3 V )					
Disstarge reconnect	12.6V (defaults, adjustable range11.5-13 V)					
Standby current	< 10mA					
USB output	5V /2A Max					
Operating Temperature	-35~+60°C					
Size / Weight	133*70*35mm / 132g					

#### \* all red color voltage X2, hile using 24V system.

<sup>\*</sup>Product specifications are subject to change without notice.