

User's Manual

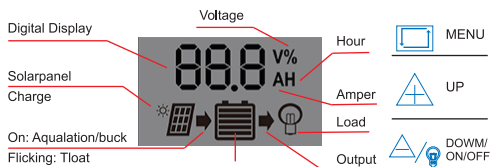
SAFETY INSTRUCTIONS

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 dissipation.

LCD DISPLAY / KEY



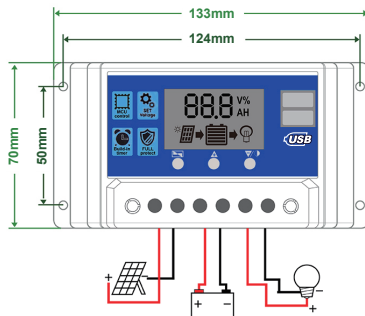
MENU : Switch between different display or to enter / exit setting by long press.
 UP : Press to increase value.
 DOWN : Press to decrease value

SYSTEM CONNECTION

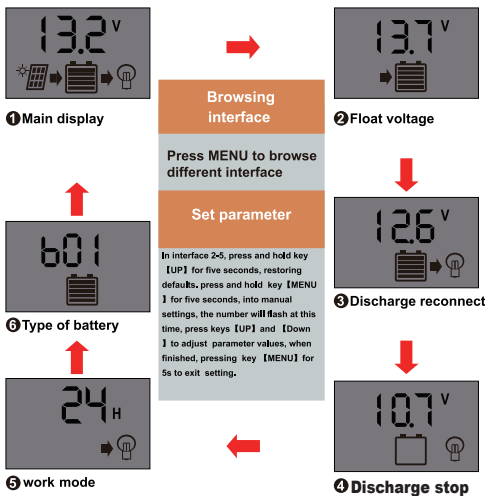
1. Connect the battery to the charge regulator-plus and minus.
2. Connect the photovoltaic module to the regulator-plus and minus.
3. Connect the consumer to the charge regulator-plus and minus.

The reverse step applies when uninstalling!

An incorrect sequence step can damage the controller!



LCD DISPLAY / SETTING



Attn:

1. press the[DOWN] button to ON/OFF load manually at main display.
2. The work mode is working as below.
 [24H] load output 24 hours
 [1-23H] load on after sunset and close after setting hours.
 [OH] 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 slow flashing	Over load	Reduce load watt
Load icon slow flashing	Short circuit protection	Auto reconnect
Power off	Battery too low reverse	Check battery/connection

TECHNICAL PARAMETER

MODEL	PY-PU2410	PY-PU2420	PY-PU2430
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 14.4V	B02 Gel 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)		
Discharge 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.

*Product specifications are subject to change without notice.