

User's Manual

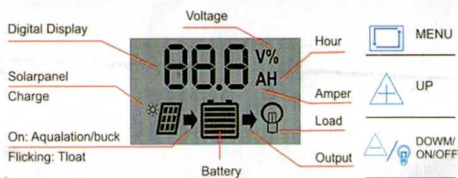
SAFETY INSTRUCTIONS

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.
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 MPPT 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



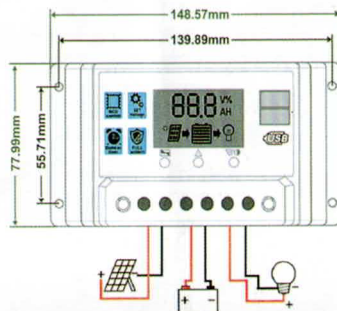
MENU : Switch between different display or to enter / exit setting by long press.
UP : Press to increase value.
DOWN : Press to decrease value.

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



① Main display



② Float voltage



Press MENU to browse different interface

Set parameter

In Interface 2-5, press and hold key [UP] for five seconds, restoring default, press and hold key [MENU] for five seconds, into manual settings, the number will flash at this time, press keys [UP] and [DOWN] to adjust parameter values, when finished, pressing key [MENU] for 5s to exit setting.



③ Type of battery



⑤ work mode



④ Discharge reconnect



⑥ Discharge stop

Attn:

1. press the[DOMN] 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	SY1024H	SY1524H	SY2024H	SY3024H	SY4024H	SY5024H	SY10024H
Batt voltage	12V/24V auto						
Charge current	10A	15A	20A	30A	40A	50A	100A
Discharge current	10A	15A	20A	30A	40A	50A	100A
Max Solar Input	< 50V						
Equalization	B01 sealed		B02 Gel		B03 flood		
	14.4V		14.2V		14.6V		
Float	13.7V (defaults, adjustable)						
Discharge stop	10.7V (defaults, adjustable)						
Discharge reconnect	12.6V (defaults, adjustable)						
USB output	5V /3A						
Self-consume	< 10mA						
Operating Temperature	-35~+60 C						
Size / Weight	150*78*35mm / 150g						

• all red color voltage X2, X4 while using 24V/48V system.

*Product specifications are subject to change without notice.