

PWM Solar Charge Controller User Manual

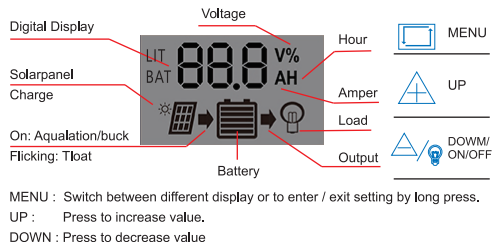
SAFETY INSTRUCTIONS

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. This controller is suitable for lithium batteries and all kinds of 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.**
5. The controller will be hot when running. Please note that the controller is installed on a flat, well ventilated surface.

PRODUCT FEATURES

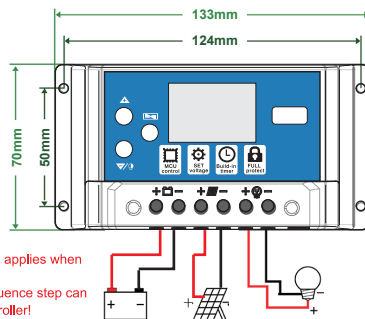
1. Build-in industrial micro controller , all adjustable parameter.
2. Fully 3-stage PWM charge management.
3. Build-in short-circuit protection, open-circuit protection, reverse protection, over-load protection.
4. Dual MOSFET Reverse current protection, low heating dissipation.
5. There are lithium battery and lead-acid battery switching function (at the battery type interface, 3 seconds into the switch settings), the default is lithium battery.

LCD DISPLAY / KEY



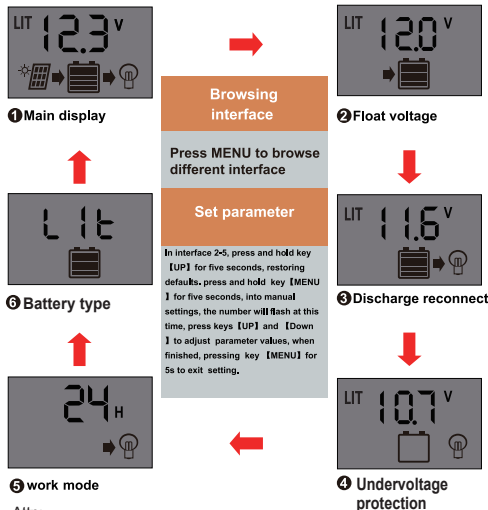
SYSTEM CONNECTION

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



5 work mode

Attn:

1. press the[DOWN] button to ON/OFF load manually at main display.
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 | 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 | KYZ 10 | KYZ 20 | KYZ 30 |
|-------------------------|--|--------|--------|
| Batt voltage | 12V / 24V auto adapt | | |
| Charge current | 10A | 20A | 30A |
| Discharge current | 10A | 10A | 10A |
| Max Solar Input | < 41V | | |
| Equalization | lithium battery (Lit) : 12.8V Lead acid battery (bAt) : 14.4V | | |
| Float | Lead acid battery: 13.7V (defaults, Adjustable range13-15V) Lithium battery: 12.0V (defaults, Adjustable range11.5-12.8V) | | |
| Undervoltage protection | Lead acid battery: 10.7V (defaults, Adjustable range9.0-11.5V) Lithium battery: 10.7V (defaults, Adjustable range9.0-11.0V) | | |
| Discharge reconnect | Lead acid battery: 12.6V (defaults, Adjustable range11.5-13V) Lithium battery: 11.6V (defaults, Adjustable range11.0-11.7V) | | |
| Standby current | < 10mA | | |
| USB output | 5V /2A Max | | |
| Operating Temperature | -35~+60 °C | | |
| Size / Weight | 133*70*35mm/140g | | |

Email: sales@inverter.com

Tel: +1 800-585-1519

Web: www.inverter.com

ATO