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 suited 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.

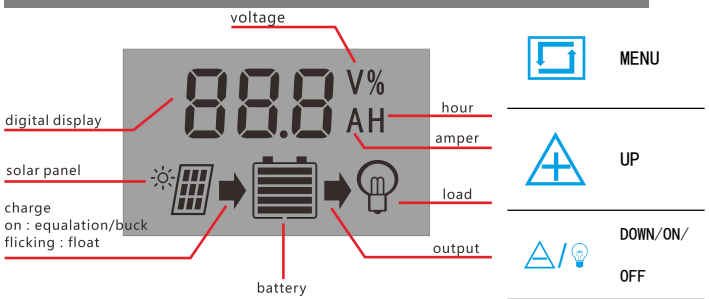
2.Big LCD display,all adjustable parameter.

3.Fully 4-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 heat production.

LCD DISPLAY/KEY



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

UP: press to increase value.

DOWN:presss to decrease value.

SYSTEM CONNECTION

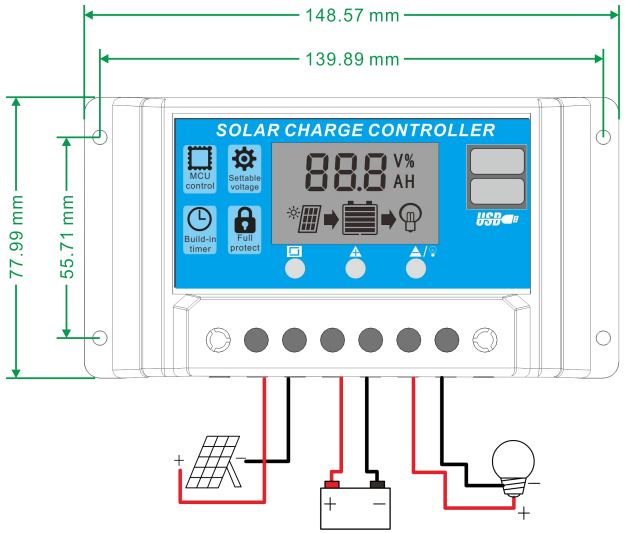
1.Connect the battery to the charge regulator - plus and minus.

2.Connect the photovoltaic module to the regulator - plus and minus.

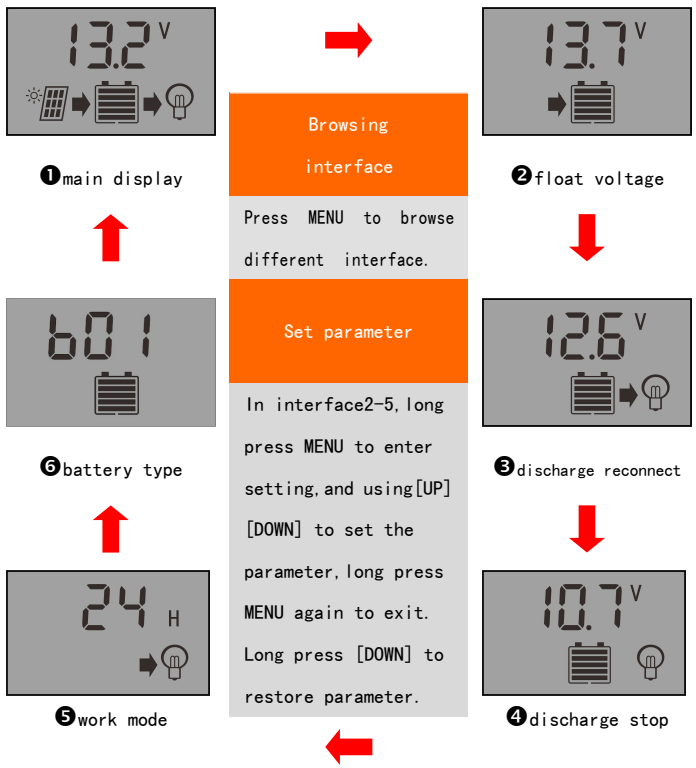
3. Connect the consumer to the charge regulator - plus and minus.

The reverse order applies when deinstalling!

An improper sequence order can damage the controller!



DISPLAY/SEETING



Attn:

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

2. the work mode is working as below:

[24H] load output 24hours

[1-23H] load on after sunset and closed after setting hours

[0H] Dusk to dawn

TROUBLE SHOOTING

Situation	Probable cause	Solution
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	KLD1210	KLD1220	KLD1230	KLD4820	KLD4830
Batt voltage	12V/24V auto			48V	
Charge current	10A	20A	30A	20A	30A
Discharge current	10A	20A	30A	20A	30A
Max Solar input	<50V			<80V	
Equalization	B01 sealed		B02 Gel		B03 flood
	14.4V		14.2V		14.6V
Float charge	13.7V(defaul,adjustable)				
Discharge stop	10.7V(defaul,adjustable)				
Discharge reconnect	12.6V(defaul,adjustable)				
USB output	5V/3A				
Self-consume	<10mA				
Operating temperature	-35~+60 ℃				
Size/Weight	150*78*35mm /150g				

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

*Product specifications are subject to change without prior notice.