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 OSS.

3. The regulator is suitable for lead acid batteries (Flood, AGM, GEL)and lithium ions, (note the use of please controller is arranged for the right type of battery) it is not suited for nickel metal hydride, or other batteries.

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 it is working, Please install the controller on a smooth, well ventilated surface.

Product Features

1.Build-in industrial micro controller.

2.Big lcd display, all adjustable parameter.

3. Fully 3-stage pwm charge management.

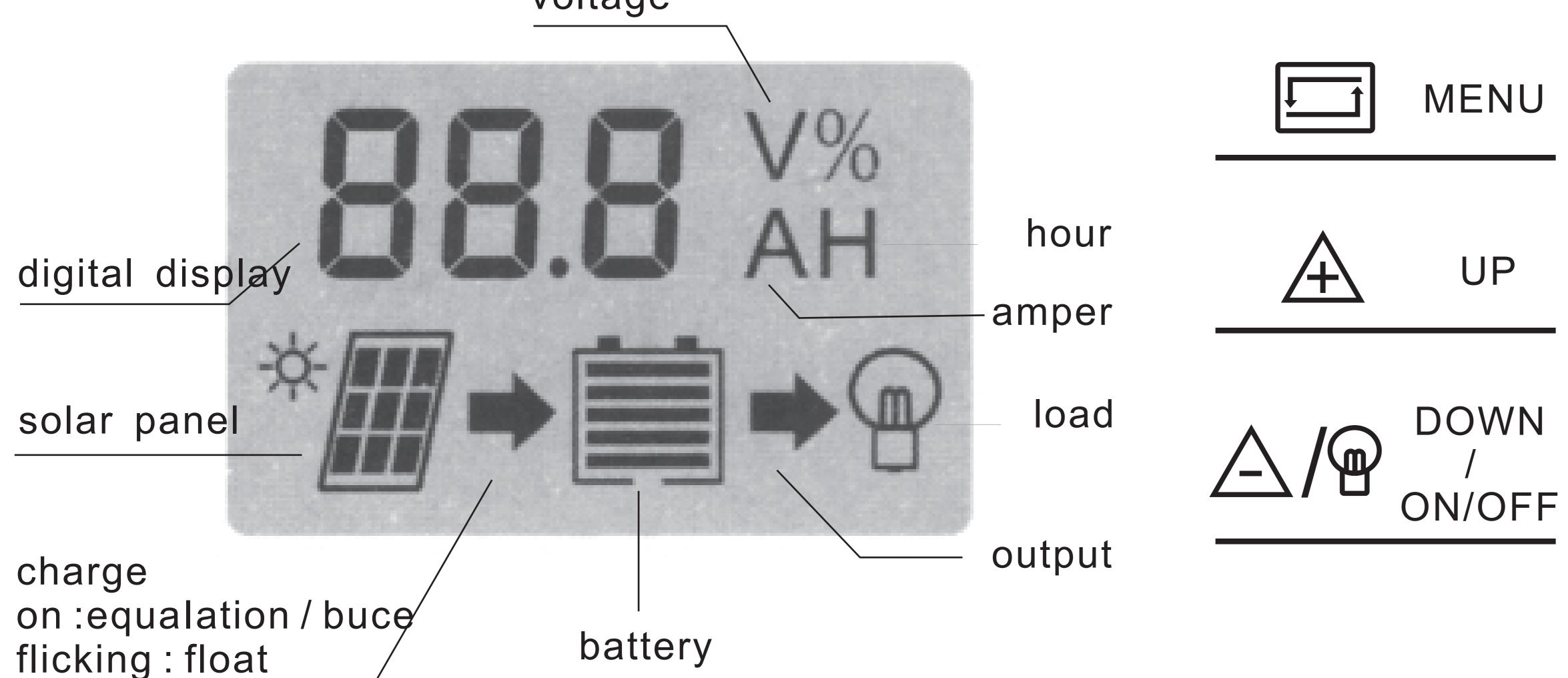
4.Build-in short-circuit protection, open-circuit protection,

reverse protection, over-load protection.

5. Dual mosfet reverse current protection, low heat production.

LCD Display/Key

voltage

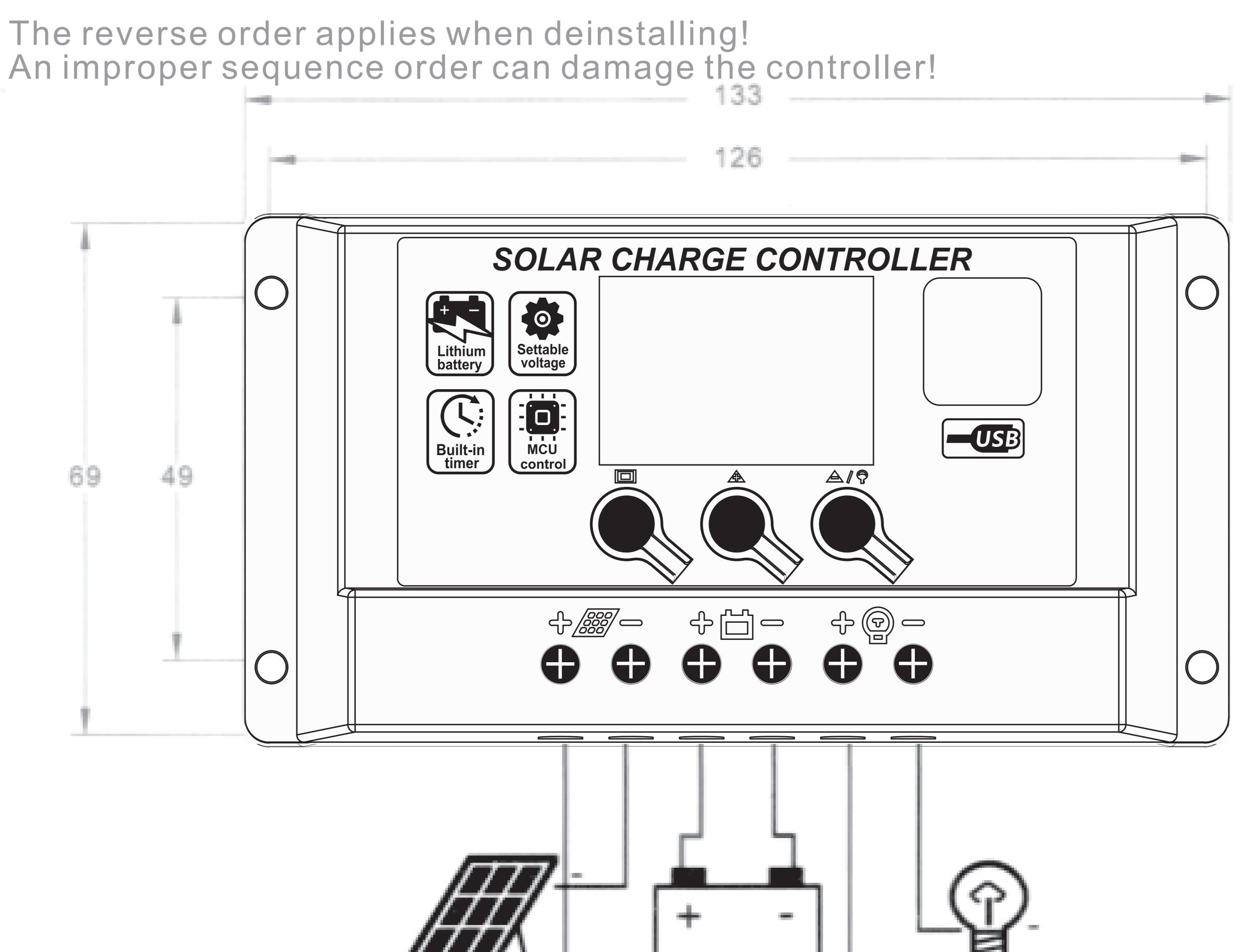


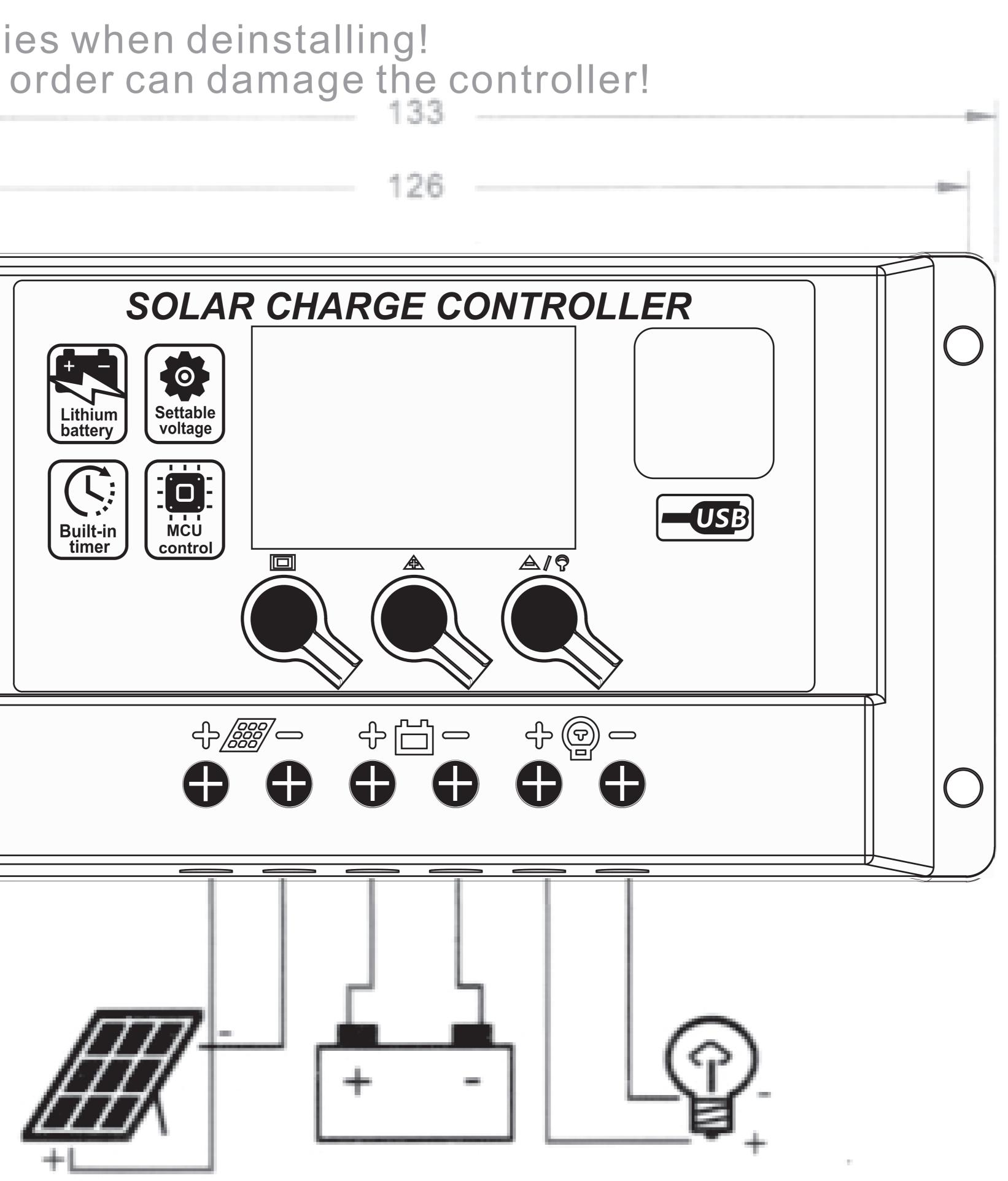
menu:switch between different display, or to enter/exit setting by long press. up:press to increase value. down:press to decrease value.

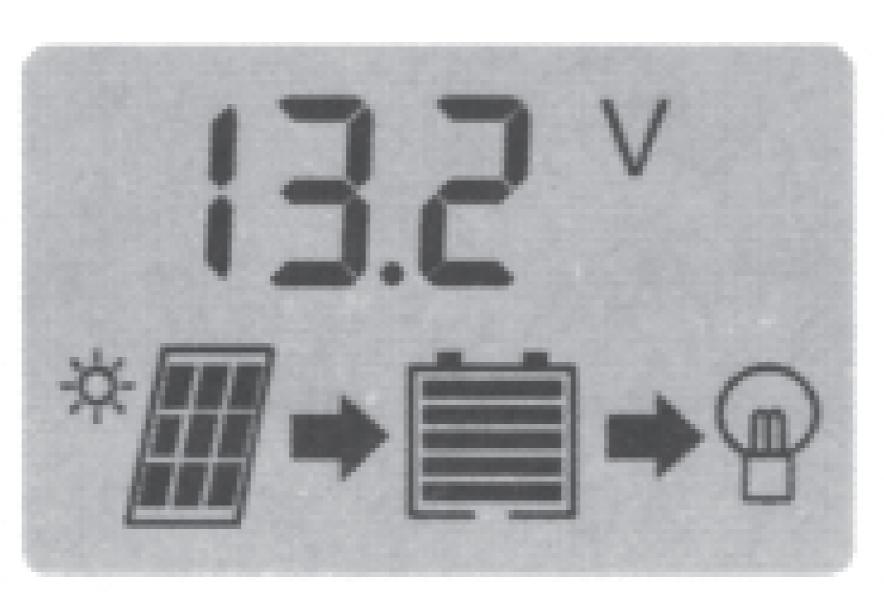
System Connection

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

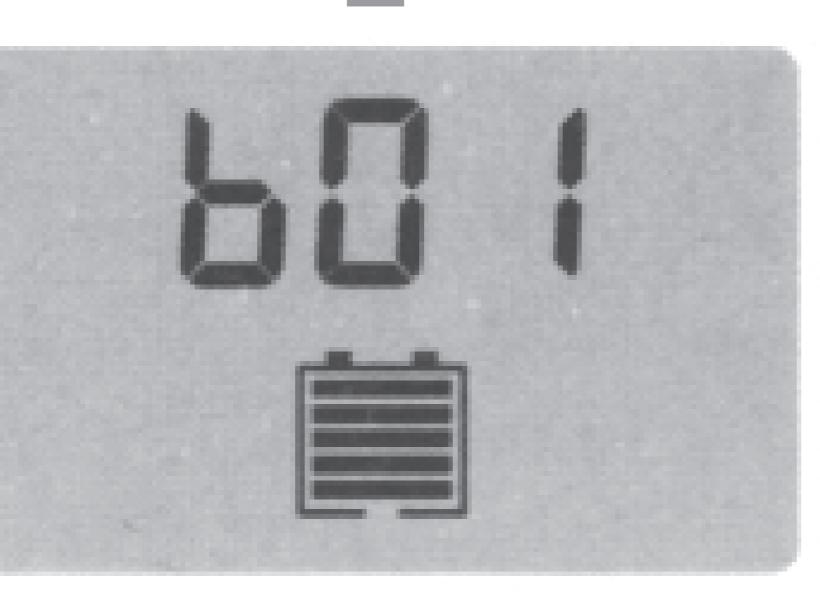
3. Connect the consumer to the charge regulator-plus and minus.



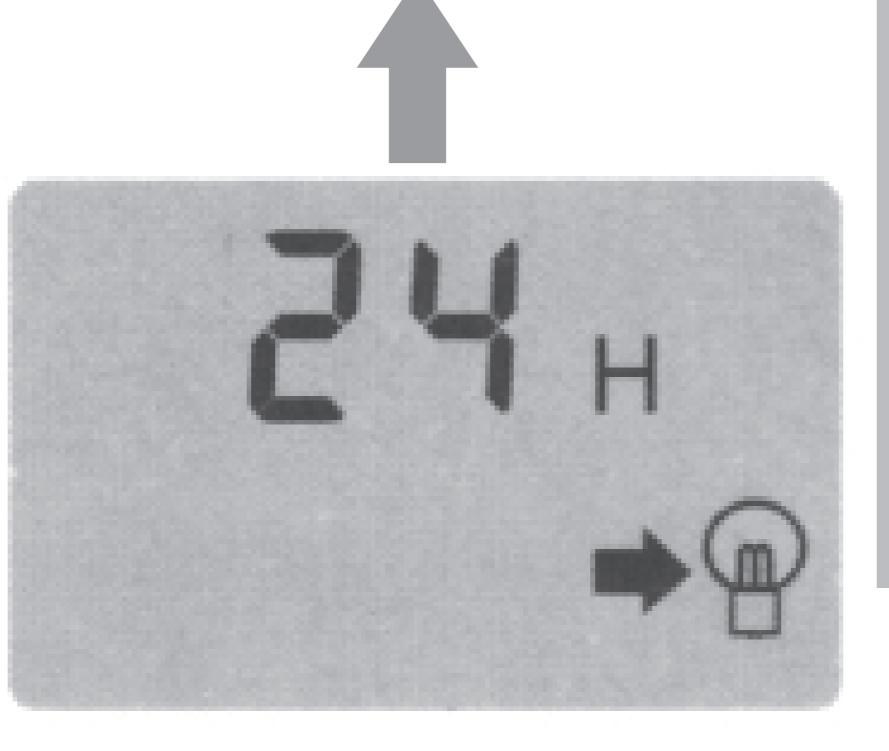




1 main display



6battery type



6 work mode 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 24 hours [1-23H]Load on after sunset and closed after, setting hours

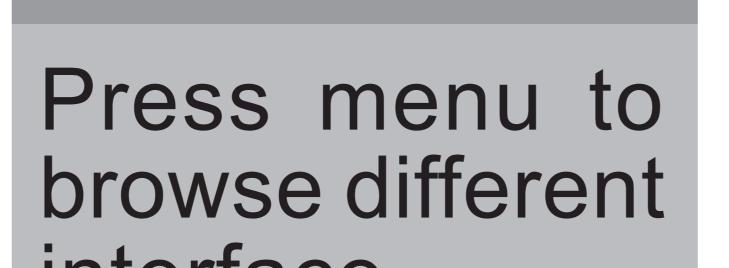
Interface

interface

In interface 2-5, long press menu to enter setting, and using [up] [down] to set the parameter, long press menu again to exit. long press [down]

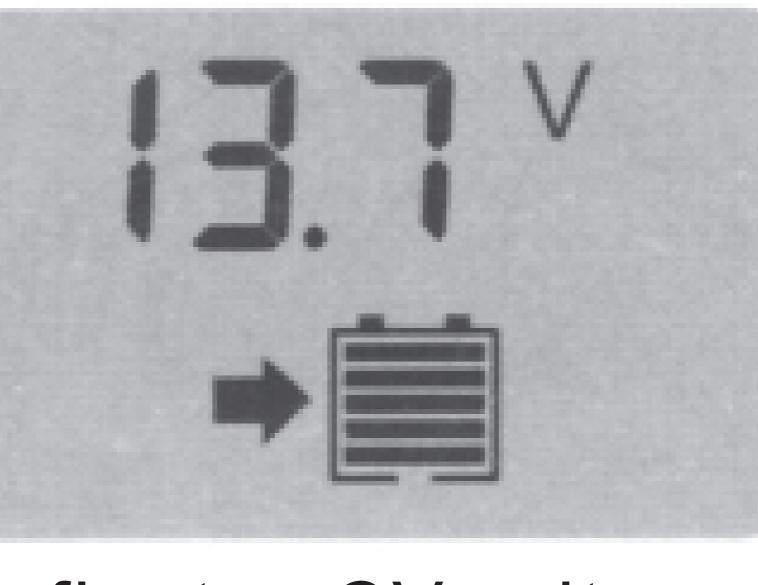
Display/Setting



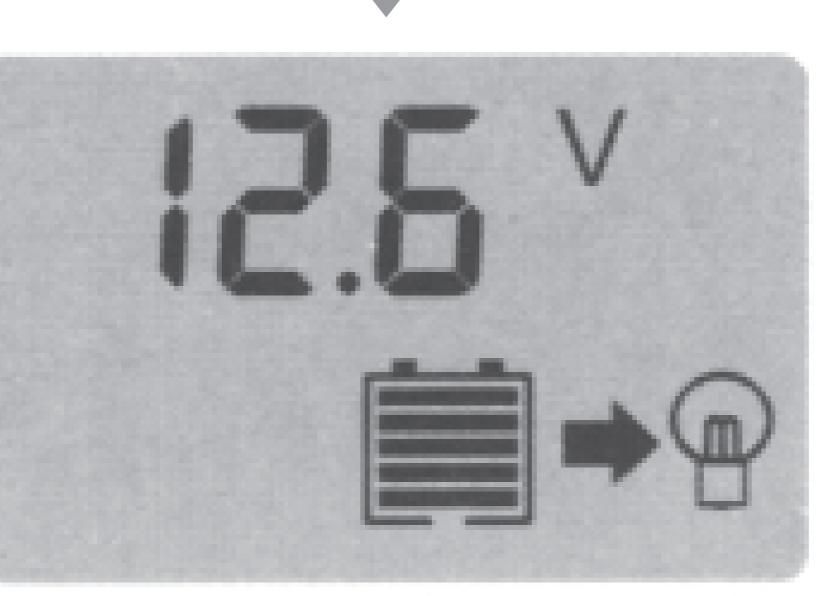




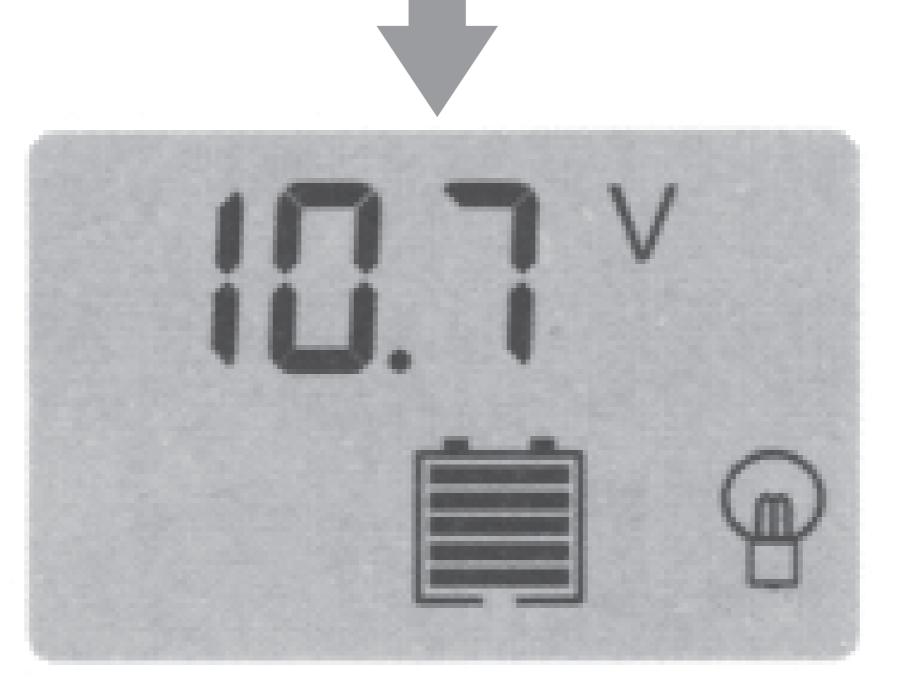








B discharge reconnect



Odischarge stop

[0H]Dusk to dawn

Situatio Charge icon when sun

Load icon

Load icon s flashing Load icon flashing

Powero

Model

System Voltage

Charge Current

Discharge Current

Max Solar Input

Battery Type

Equailzation

Float Charge

Discharge Stop

Discharge Reconnect

Battery Type

Constant Charging Voltage

Recovery Charge Voltage

Low Voltage Protection Low Voltage Recovery

b04~b07 P

USB Output

Self-consume

Operating Temperature

Size/Weight *All red color vo

*Product specific

Trouble Shooting					
DN	Pro	bable Caus	Se	Solution	
not on Solar ny or rev		r panel oper eversed	nel opened Reconnect		
Moc		e setting wro		Set again	
۱Off		Battery low		Recharge	
slow g		Overload	Rec	Reduce load watt	
		Short circuit protection	Au	to reconnect	
Ba		attery too lov	v/ Ch	Check battery/	
ff Reve		everse	Сс	nnection	
Technical Parameter					
1210		1215	1220	1230	
12V/24V AUTO					
10)A	15A	20A	30A	
10)A	15A	20A	30A	
t		< 50V			
b01 Sealed b02 GE			GEL	b03 Flood	
1	14.4V 14.2V			14.6V	
13.7V (defaul, adjustable)					
0 10.7V (defaul, adjustable)					
12.6V (defaul,adjustable)					
	thium	b05 Iron lithium 5 Strands		on lithium ion ds 4 Strands	
9	3.6V*4/*5		4.2V*3/*4		
	3.4V*4/*5		4.0V*3/*4		
	2.6V*4/*5		3.1V*3/*4		
2.9V*4/*5			3.7V*3/*4		
Parameters can not be set Special for lithium battery.					
5V/2A					
<pre>< 10mA</pre>					
$-35 \sim +60^{\circ}\text{C}$					
133*70*34mm/154g					
oltage*2,*4 while using 24V/48 system. ications are subject to charge without prior notice.					