

10A Solar Charge Controller Manual



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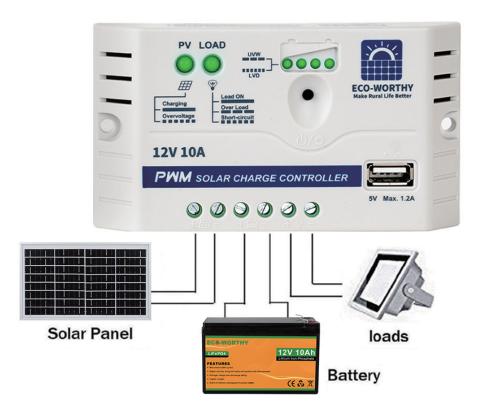
SAFETY INSTRUCTIONS

- 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 12V Sealed, GEL, Flooded and Lithium battery.
- 4. The charge controller is only suitable for regulating solar modules. Do not connect other DC or AC sources to the charge controller.

PRODUCT FEATURES

- 1. Built-in MCU chip to achieve intelligent charge and discharge control.
- 2. Overcharge, over discharge, short circuit, reverse current protection for battery.
- 3. PWM charge management chip avoids damage to the solar panel.
- 4. Normal direct charge mode and floating charge mode lengthen the system's service life.
- 5. The intuitive LED indicates the current battery charge and discharge status.
- 6. With USB port, it can charge mobile phones, tablet and other DC devices.

SYSTEM CONNECTION



- 1. Connect the battery to the charge controller
- 2. Connect the solar module to the controller
- 3. Connect DC loads to the charge controller (optional)
- * The order reverses when uninstall!
 An improper sequence order can damage the controller!

OPERATION

Select battery type

When the battery has connected to the controller, press the button for 5s till the battery indicator lights flash. Short press to select battery type. Press the button for 5s or leave it for 5s to confirm.

LED 1	LED 2	LED 3	LED4	Battery Type
	0	0	0	Sealed / Lithiu
		0	0	Gel
			0	Flooded

Turn on/off the load

When all the components are connected as order, short press the button to turn on/off the load. The "LOAD" indicator light would turn on when the load output is on.

INDICATOR DESCRIPTION

Indicator	Status	Indication	
	Off	At night or PV does not work	
PV	On	Stable PV charging	
	Flash	Over-voltage protection activate	
LOAD	Off	Load unconnected or does not work	
	On	Load at working	
	Slow flash	Overload protection activate	
	Quick flash	Short-circuit protection activate	
BATTERY	Slow flash	Under-voltage warning	
	Quick flash	Low-voltage protection	

TECHNICAL PARAMETER

10A 12V Solar Charge Controller			
Nominal output(automatic identification)	12V		
USB output	5V 1.2A		
Rated charge/discharge current	10A		
Battery input voltage range	8V~16V		
Max. PV open circuit voltage	30V		
Self-consumption	≤5mA		
Over charge protection	14.4V		
Over discharge protection	10.8V		
Float charge	13.8V		
Charging type	PWM		
Working environment temperature	-35℃ ~ +50℃		
Size	120.3x67x21.8mm		
Weight	0.1kg		
Terminals	12AWG		

SUPPORT

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If you are experiencing technical problems and cannot find a solution in this manual, please contact ECO-WORTHY for further assistance.

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