

Ocean Dream Series

OD Series PWM Solar Controller

Better than less





Built-in screwdriver

Worry-free use, It is there whenever you need it



Simple Design , Good looking

The OD series adopts rounded corners and a simple appearance design.

The white frosted plastic shell is very natural no matter where it is placed in your home or RV.



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Hidden Design

The OD series adopts a sliding cover design, which covers the terminal and screwdriver.

It hides the messy wires of the connection port by extending the lower edge. It can match your furniture style better.



Free USB Charging

Support high current mode, the maximum 2.4A
charging current charges your mobile device faster 10A
/ 20A *2 USB, Other items 4 USB

12 Safety Protections

1, Automatic Voltage Switch	2, Over charging and over discharging protection	3, Overload protection	4, Short Circuit Protection
Ldsolar controller can switch the system voltage according to the battery voltage automatically	Ldsolar controller can prevent the battery from over charging and over discharging and increasing the battery life.	Ldsolar controller will cut off output, if the current of output is more than 1.1 times rated current	When the solar panel or the Load is short circuit, Ldsolar controller can stop charging or turn off the output immediately. It can prevent battery from damaging
5, Reverse Connected Protection	6, Battery Over Voltage Protection	7, Auto Temperature Compensation	8, Over Temperature Protection
If the polarity of battery or solar panel is reversely connected, Ldsolar controller will not be destroyed. After correcting the connection, Ldsolar controller will work normally.	When the voltage of battery was more than 16.5V (12V system), Ldsolar controller will turn off charging and output.	The in-built sensor in Ldsolar controller can sense the outside temperature and regulate the battery charging and over discharging. It can increase battery life up to 30%	When the temperature of inside controller is up to 85°C, the controller will stop charging and discharging.
9, Lighting Protection	10, Multiple load work modes	11, Prevent Reverse Flow of Current	12, Battery Type Selection
Ldsolar controller could protect small induction thunder	Ldsolar controller can automatically detect when the day sets and night begins and set a working time. It can switch on/off the output automatically	During nighttime when voltage of battery is more than that of solar panel, current could start flowing from battery to panels. This could be very harmful for solar panel. Ldsolar controller ensures that the current always flows from panels to batteries, and never in the reverse direction.	Ldsolar controller is designed for multiple battery types: Sealed, Gel, Flooded, LiFePO4 and LiO2 to ensure efficient charging.

ARM architecture, high-quality 32-bit main control chip

Make your system more stable and efficient

The main control chip adopts STMicroelectronics, and the other components adopt Samsung and Fenghua Hi-tech components to ensure the stability and life of the controller.

The running program of the upgradeable frame structure guarantees the low loss of the controller and makes it more efficient.





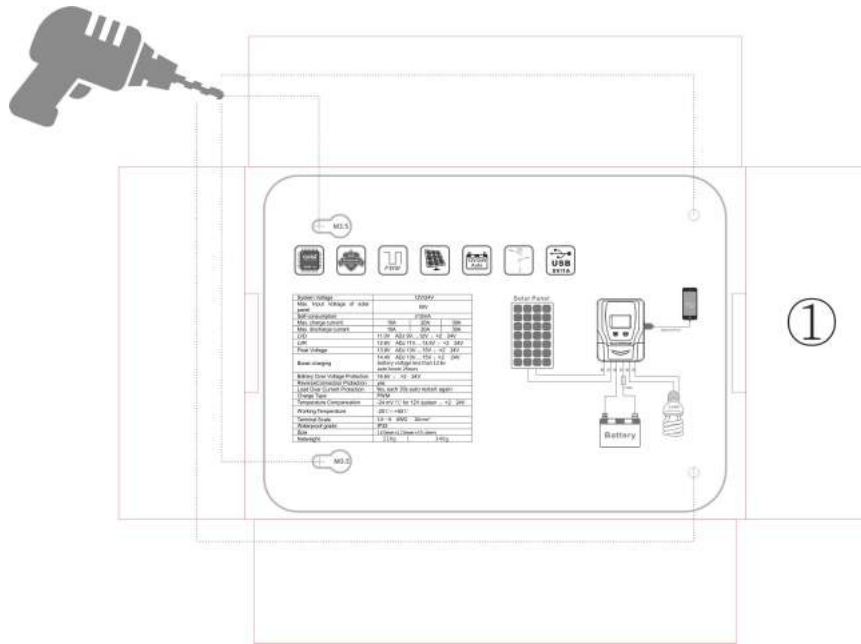
Customized large-diameter red and black terminals (Patented)

*Customized large-diameter port is more suitable for solar systems that require large-diameter wires to reduce the voltage drop and losses in wires

*The red and black design allows customers to distinguish positive and negative more intuitively, and good customer experience

*The shrapnel is designed in the crimping frame to avoid breaking the wire and causing poor contact

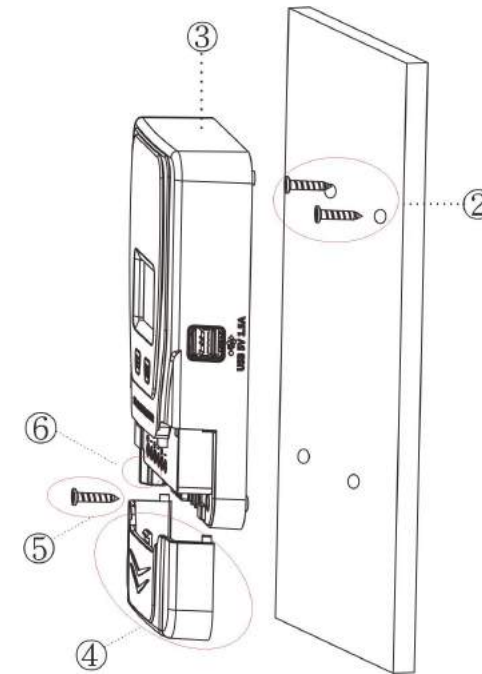
Installation



1 , Find the positioning map on the back of the color box or on the manual

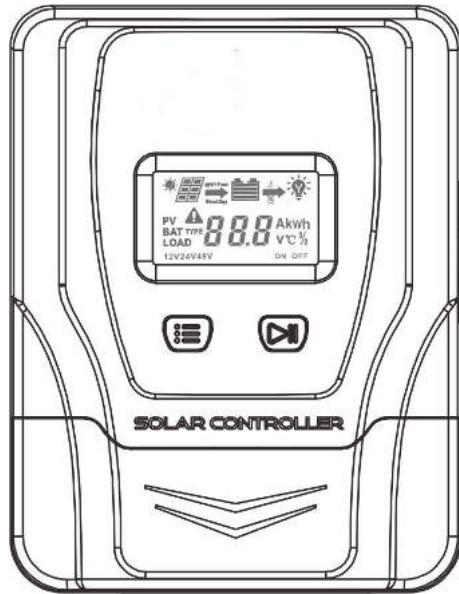
2 , Use the positioning map to fix the screw in the position you want

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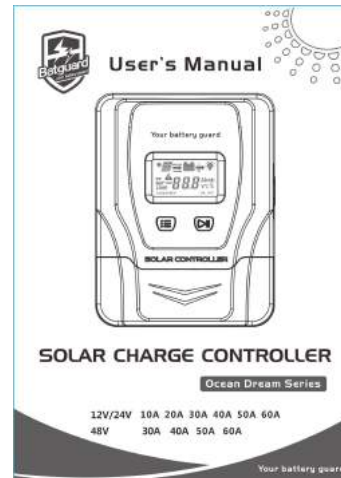


3 , Mount the controller. The 10A / 20A style also has two fixing holes in the terminal cover, which can be installed with screws

Packing List



Controller*1PC



User's Manual*1PC



Screwdriver*1PC



Product parameters

#when battery type is setted to Lithium battery, Temperature consumption is 0, unchangeable.
 ※Above the parameters are in 12V system at 25°C, twice in 24V system and quadruple in 48V system
 *The default value is set based on the lead-acid battery. For other battery type, please refer to the manual

Model	OD2410C	OD2420C	OD2430C	OD2430S	OD2440S	OD2450S	OD2460S	OD4830S	OD4840S	OD4850S	OD4860S
System Voltage	12V/24V DC auto							12V/24V/48V DC auto			
PV Max Input Voltage	55V							100V			
Self-consumption	<10mA										
Max Charging current	10A	20A	30A	30A	40A	50A	60A	30A	40A	50A	60A
Max Discharging current	10A	20A	20A	30A	40A	50A	60A	30A	40A	50A	60A
Battery type	Sealed(Default)/Gel/Flood/Lithium										
LVD※*	11.0V ADJ 9V...12V ; x2/24V ; x4/48V										
LVR※*	12.6V ADJ 11V...13.5V ; x2/24V ; x4/48V										
Float Voltage※*	13.8V ADJ 13V... 15V ; x2/24V ; M/48V										
Boost Voltage※*	14.4V ADJ 13V...17V ; x2/24 ; x4/48V										
	battery voltage less than 12.6v auto boost 2hours										
Battery Over Voltage ※ *	16.5V ; x2/24V ; x4/48V										
Reverse Connection Protection	yes										
Load Over Current Protection	Yes, each 30s auto restart again										
Controller Over Temperature	Yes										
USB Output	5VDC/2.4A 2PCS			5VDC/2.4A 4PCS				5VDC/1A 4PCS			
Charging Type	PWM										
Charge circuit voltage drop	<=0.25V										
Discharge circuit voltage drop	<=0.1V										
Temperature Consumption#	For 12Vsystem:-24mV /°C ; x2/24V ; x4/48V										
Relative humidity	≤95%, N.C.										
WorkingTemperature	—20°C~+55°C°C(Product can work continuously at full load)										
LCD temperature range	—20°C~+70°C										
Waterproof grade	IP32										
Mounting hole size	Φ5mm										
Terminals	10mm²/8AWG			16mm² /6AWG		25mm²/4AWG		16mm² /6AWG		25mm²/4AWG	
Weight	225g	350g	380g	480g	520g	690g	780g	500g	540g	710g	800g
Overall dimension(mm)	165*120*39.4			170*130*50		190*145*55		170*130*50		190*145*56	