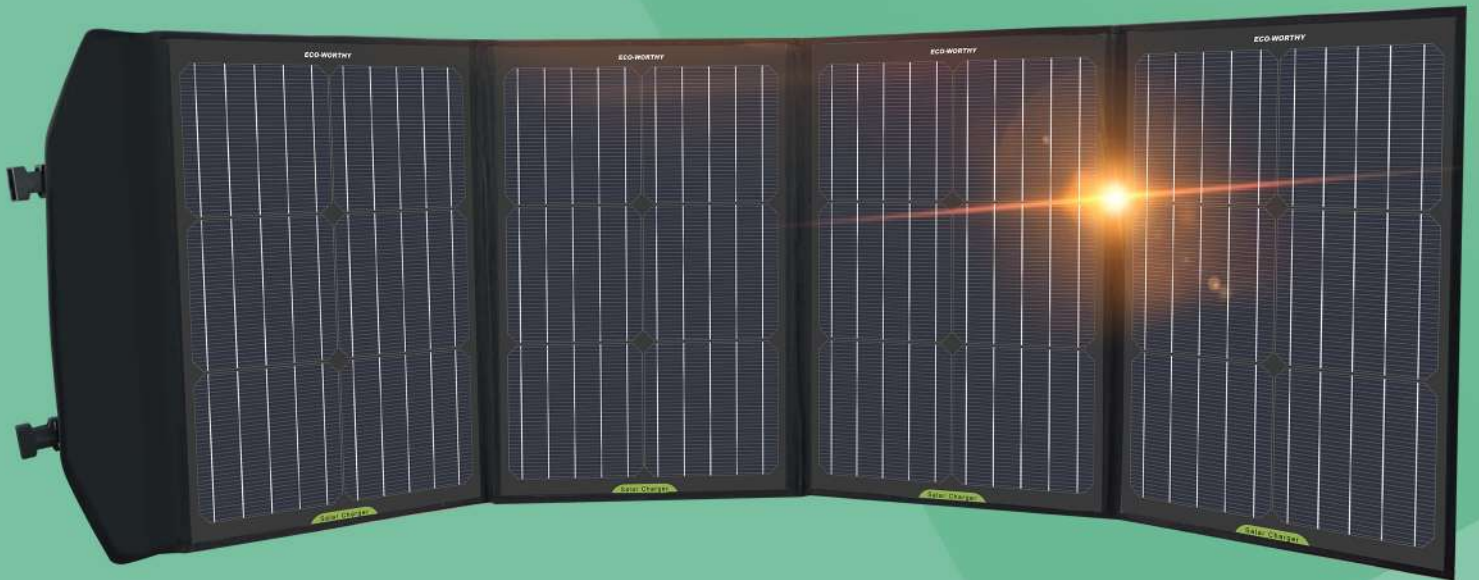


**ECO-WORTHY**

# ECO-120W FOLDABLE SOLAR CHARGER



**USER MANUAL**

# Contents

---

1. Production Instruction
2. Technical Parameter
3. Component
4. Wiring
5. Tips for Panel Setting
6. Tips for Controller Use
7. The Connection Way for 2 Kits
8. Important Safety Information
9. Warning

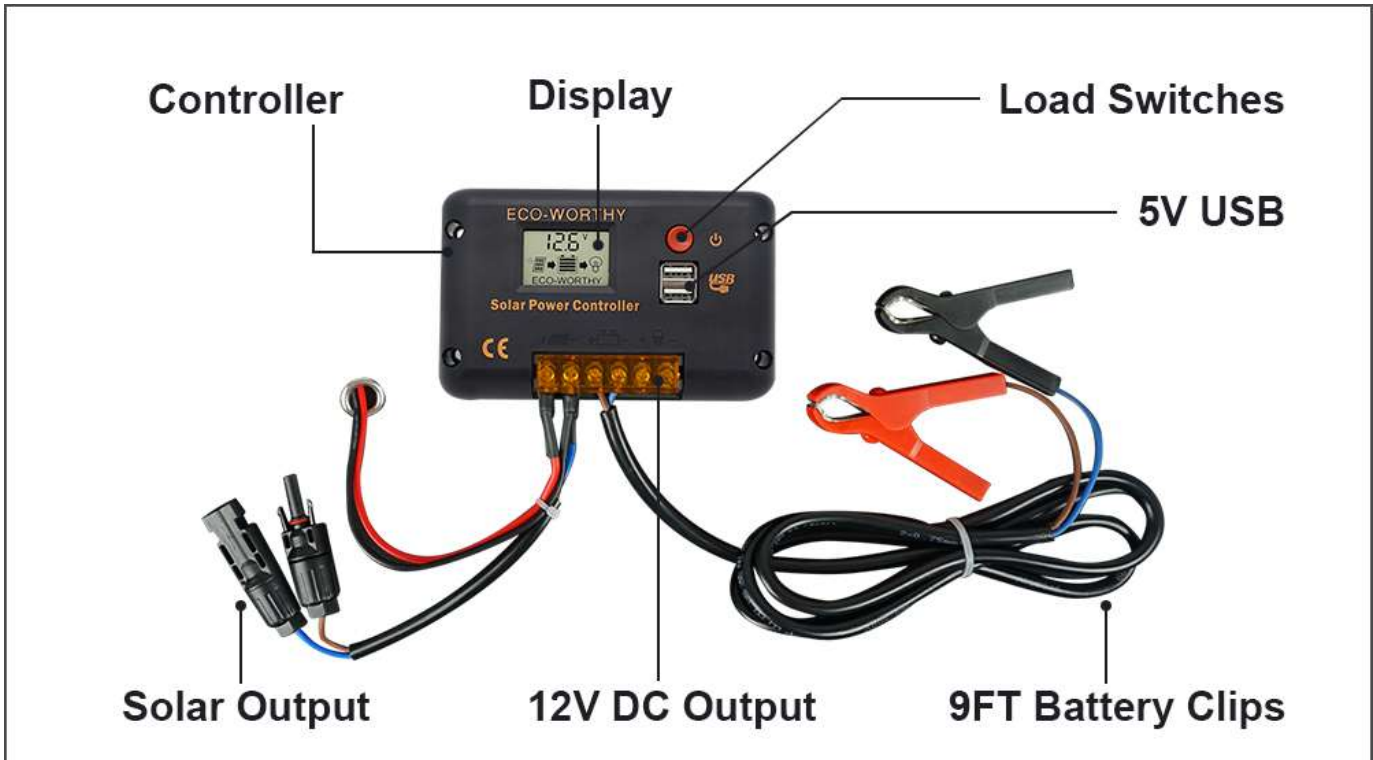
# Production introduction

This product is a portable solar charging folding bag, ECO-WORTHY solar panel is designed to be foldable; High-efficiency mono cell for better charging effect; equipped with intelligent controller for various occasions and protection of electronic equipment.

## Technical Parameter

Product Name	120W Foldable Solar Charger
Composition	4 x 30 W, 18V
Solar Cell Type	Mono-Crystalline Silicon
Open Circuit Voltage	16-18 V
Controller Port	18V DC solar port*1 5V 2A USB port*2 12V DC load port*1
Folded Dimensions	21.5* 14.6 * 2.5 inches
Expanded Dimensions	62.2 * 21.5 * 0.2 inches
Net Weight	3.82kg(8.42lb)
Internal Cable	9.84feet
External Cable	9.84feet

## Component



**Controller:** Controls the charging and discharging of the battery, and has anti-backlash, anti-overcharge, anti-over-discharge, anti-reverse connection and so on.

**12V DC Output:** The output of the controller can be connected to 12V load, the maximum current is 20A, and it will be automatically disconnected when the battery is exhausted.

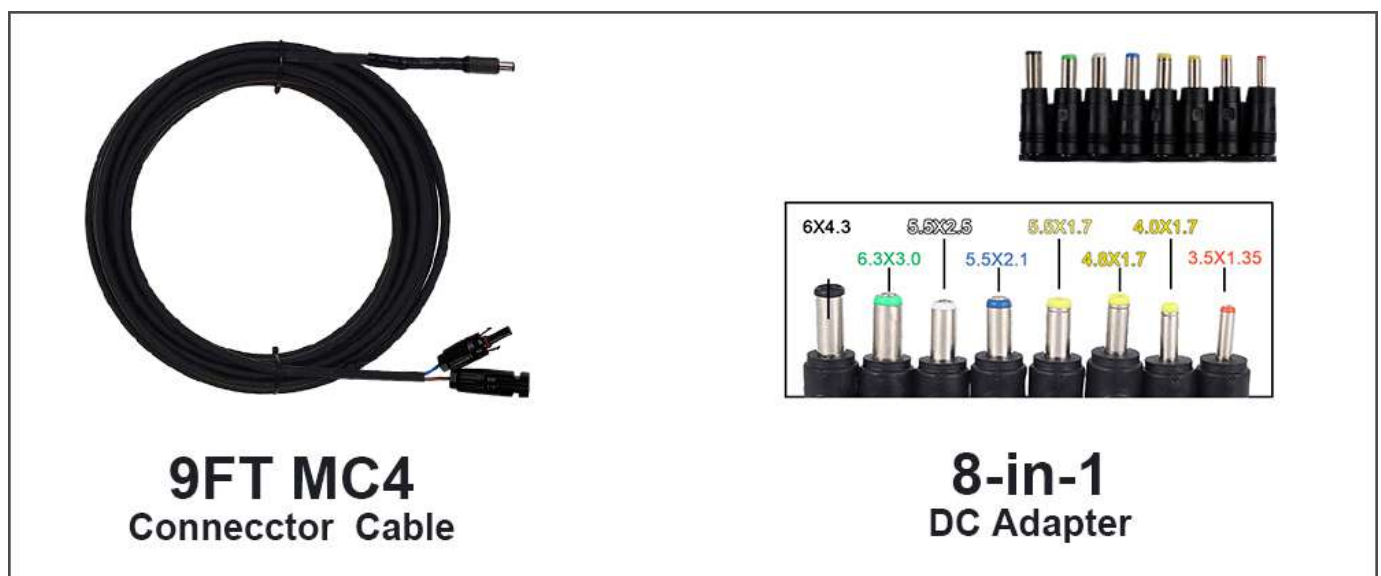
**Solar Output:** Solar 18V output that powers some devices that already have a built-in controller. **Load Switch:** Controls the on and off of the output.

**Display:** Displays information such as the charge status and discharge status and battery voltage. **5V USB:** Powers electronic devices such as mobile phones.

**Battery Port:** The controller needs to be connected to the battery to work. Only when the battery is connected, the output and USB will supply power. The applicable battery is a 12V/24V lead acid battery.

**Charging Port for Computer:** Plug the mc4 connector into the Solar Output to power the computer.

**DC Adapter:** Use a DC converter for different DC ports.



## ■ Wiring

**Wiring A:** Support your solar generator/laptop

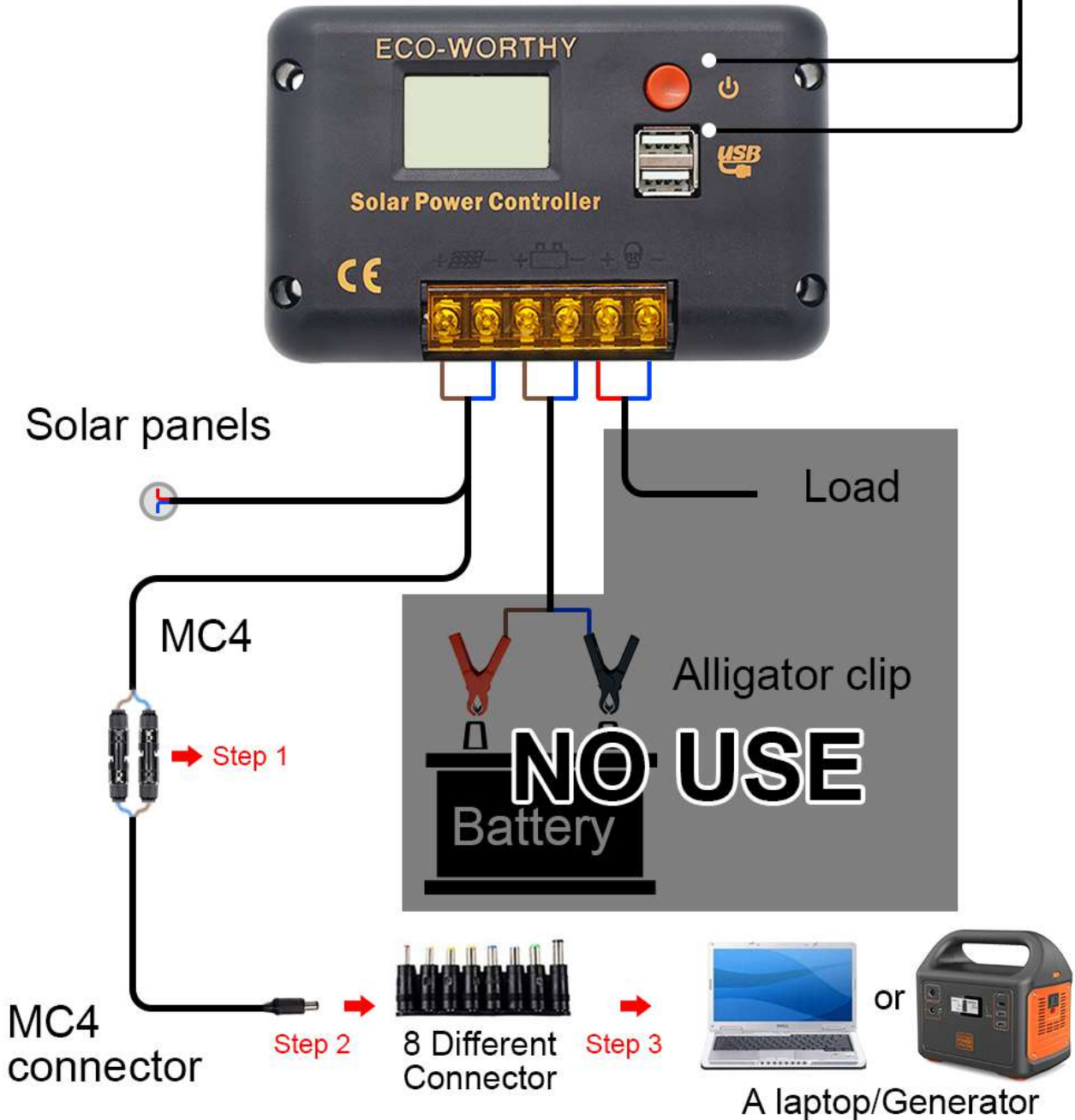
**Step 1:** Connect the 9FT MC4 connector cable to the solar output cable via the MC4 connector.

**Step 2:** Choose the right DC adapter from 8 in 1 DC adapters for your solar generator and connect the right DC adapter to the DC port of 9FT MC4 connector cable.

**Step 3:** Connect the 9FT MC4 connector cable with the right DC adapter to your generator/laptop.

# ECO-WORTHY

When you connect to your generator as this way, the switch / battery port / load port / usb port will be invalid.

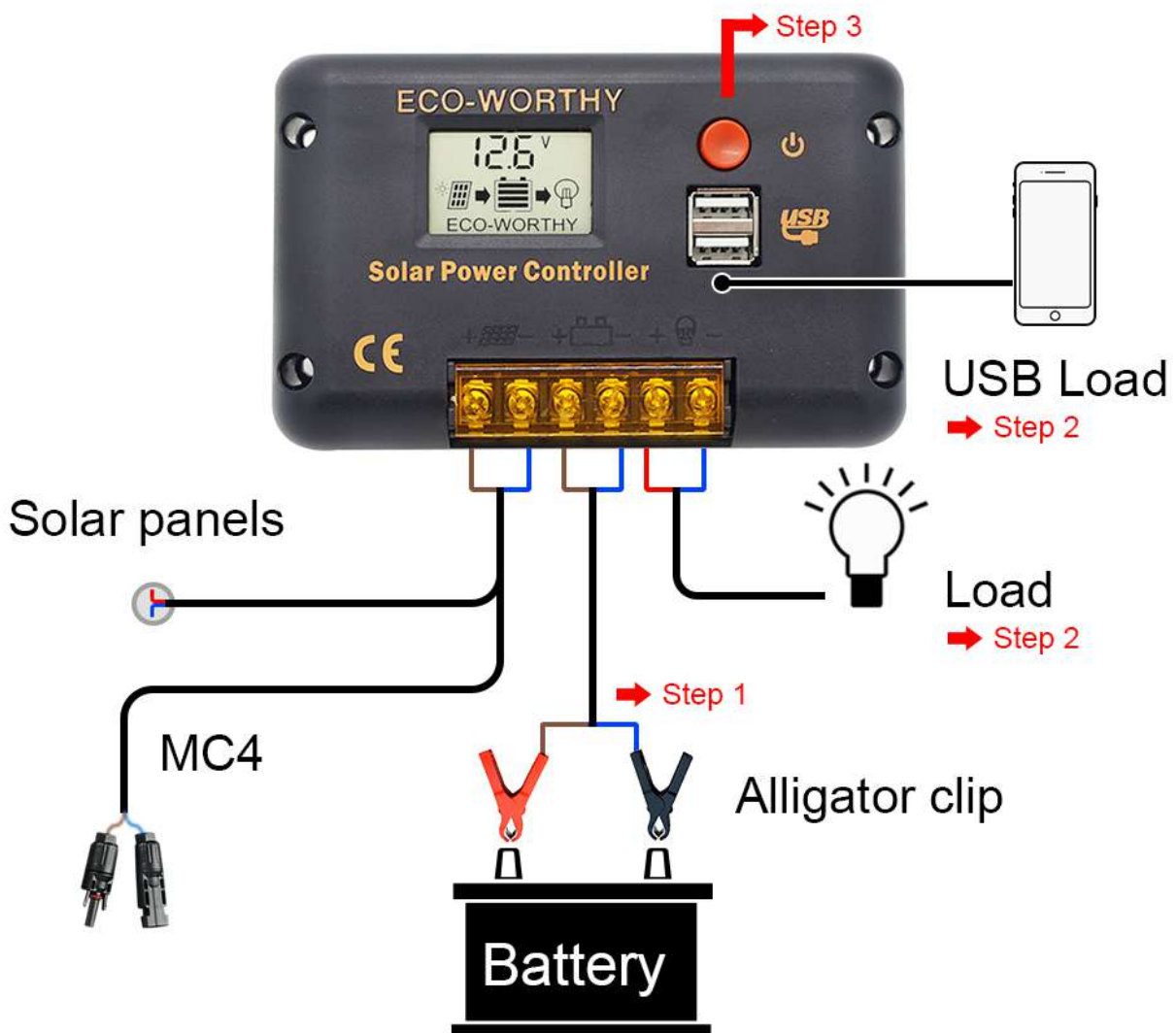


## Wiring B: Support your battery charging for phone/load

Step 1: Because the solar panels are connected, you only need to connect your battery with the pair of the battery clips.

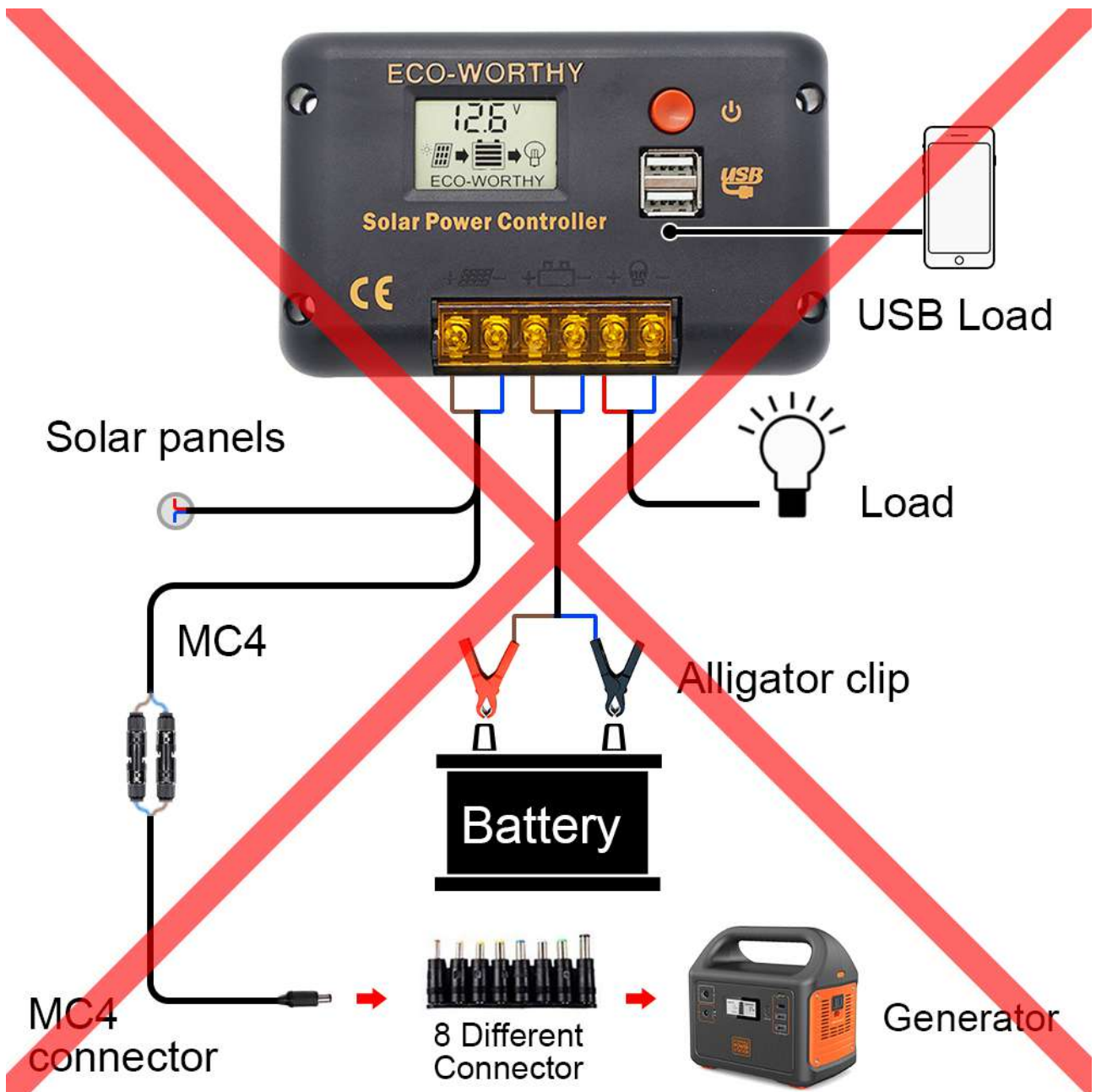
Step 2: Connect your phone to the 5V USB port or connect your load to the DC load port on the controller as your need.

Step 3: Open the controller that comes with the system.



## Caution

please don't support your generator and support your battery charging at the same time!





## Tips for panel setting

Tips 1: The panel bag must be totally opened. If there is a small piece of the panel in the shadow, the output of the panel will be deeply affected. Please set (pointing south) the panel at an angle of 45 degrees to use to the greatest advantage.



### Caution:

The foldable solar charger is consisted of 4 pieces solar cells. 1 of 4 pieces solar cells in the shadow is equal to 4 pieces cells in the shadow. One leaf on the 1 of 4 peices solar cells is equal to that there are leaves on all 4 peices solar cells.

# ECO-WORTHY

Tips 2: It is forbidden to place the panel in rain.

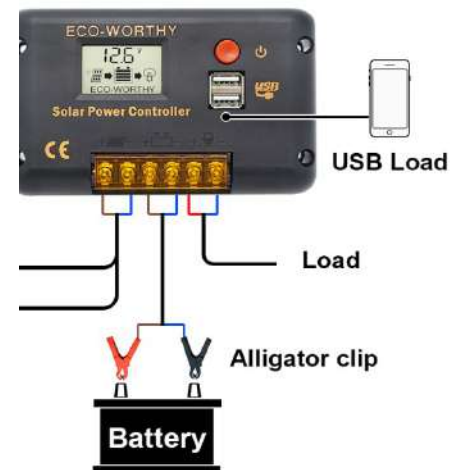


## Tips for controller use

Tips 1: The controller can prevent the battery from being damaged, anti-inverse charging, overcharging and overdischarging. What's more, the controller can display a real-time voltage and discharge status of the battery.

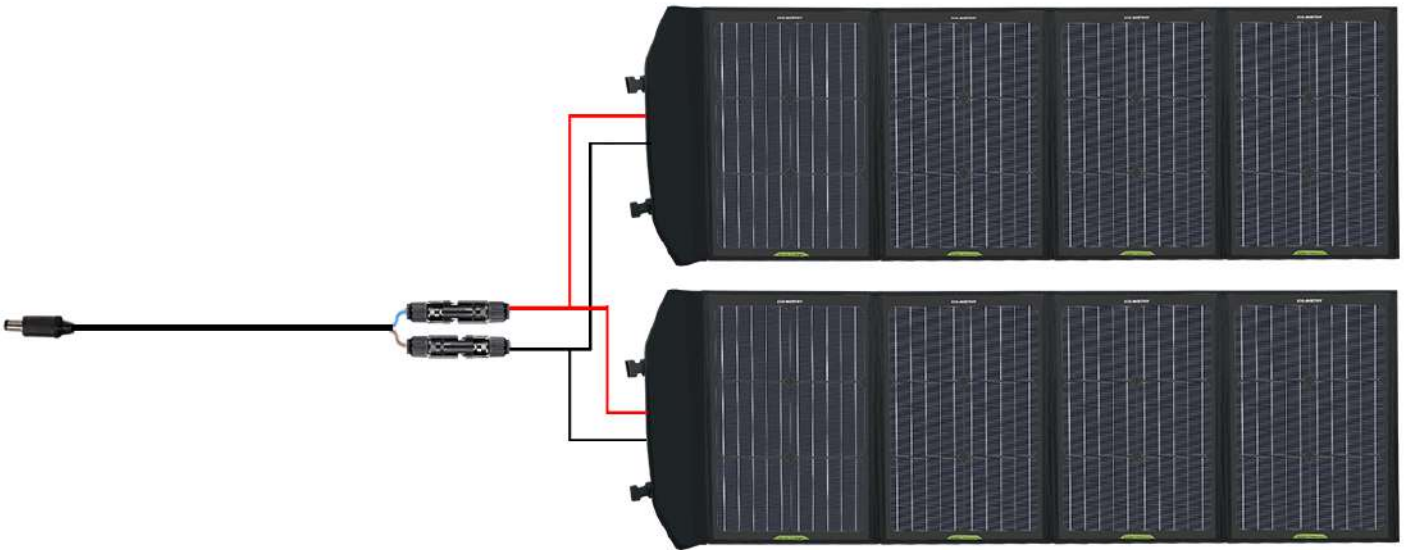
Tips 2: If you want use as wiring B, please make sure you have connected the controller to the battery. If not, your load/appliances won't be powered.

Tips 3: Prohibit any short circuit connection behavior It is forbidden to reversedly connect the battery/load, otherwise it may cause damage to your battery and appliance.

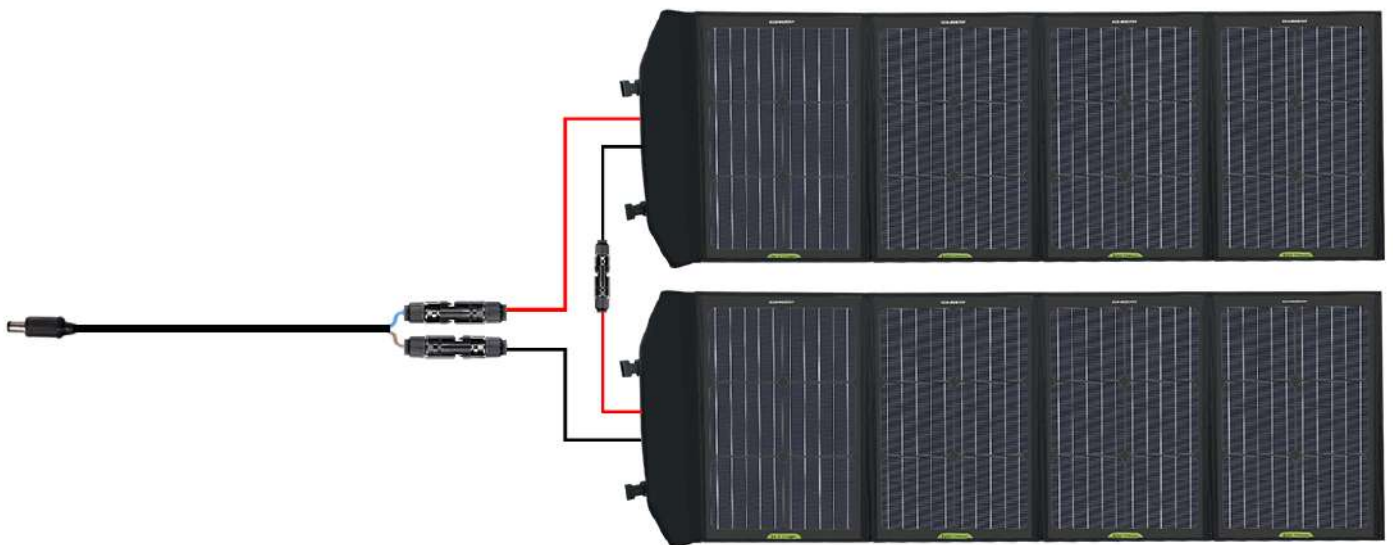


## The Connection Way for 2 Kits

① If you want 12V 240W, you can connect 2 pcs in parallel.



② If you want 24V 240W, you can connect 2 pcs in series.



## CAUTION

Please carefully read these instructions prior to using this product. Failure to follow the precautions and warnings contained in these instructions may lead to product damage.

## Important Safety Information

This product is designed for use under specific conditions. If you are unsure of whether or not the product can be used in a certain way, please contact us at our email address, [info@eco-worthy.com](mailto:info@eco-worthy.com). We strongly discourage the alteration or modification of this product. If you need to alter or modify the product, please contact us for further information. We will not assume responsibility for any consequences that result from modification of the product.

## WARNING

- Read and ensure that you understand all the contents of this manual. Failure to follow the instructions may lead to severe injury or property damage.
- The warnings, precautions, and instructions contained in this manual do not cover every possible scenario. When using this product, you should exercise common sense and take necessary precautions. Remain aware of your environment and ensure that you use this product in a safe and responsible manner.
- Users should not operate or assemble this product before reading the manual and becoming familiar with how the product operates.

- Please do not modify this product in any way. Unauthorized modification of this product may impact the product's functionality or safety, and could reduce the product's service life.
- Use an appropriate electrical load (less power than this product's power output). Do not attempt to forcefully increase this product's load. This product is designed for certain conventional uses. Following these conventions will enable the product to function safely and in accordance with expectations. Do not use this product in ways that fall beyond the scope of product design.
- Avoid scratching the surface with hard objects during use, and should not be in contact with strong corrosive chemicals, avoiding bending force and causing internal battery rupture, affecting power generation efficiency.

## CUSTOMER SERVICE



