

Brnnoo BRRNOOnrhi8afecq

Brnnoo 8.5W 12V Monocrystalline Solar Panel Kit Instruction Manual

Model: BRRNOOnrhi8afecq

1. INTRODUCTION

This manual provides essential instructions for the safe and efficient use of your Brnnoo 8.5W 12V Monocrystalline Solar Panel Kit. This kit is designed to provide portable solar power for various applications, including outdoor activities, greenhouses, and camping. Please read this manual thoroughly before operating the product and retain it for future reference.

2. PACKAGE CONTENTS

Verify that all items listed below are included in your package. If any items are missing or damaged, please contact customer support.

- 1 x Monocrystalline Solar Panel (8.5W, 12V)
- 1 x Clip Wire (Alligator Clips)
- 1 x Car Charger Adapter
- 1 x Double Ended Line (DC to DC cable)



Figure 2.1: The Brnnoo solar panel kit includes the solar panel, clip wire, car charger, and double-ended line.

3. SPECIFICATIONS

Feature	Specification
Product Material	Monocrystalline Silicon
Conversion Rate	19%
Maximum Power (Pmax)	8.5W
Working Voltage (Vmp)	12V
Working Current (Imp)	0 to 700mA
Item Weight	11.6 ounces (approx. 329g)
Product Dimensions	12.99 x 7.87 x 1.57 inches (approx. 33 x 20 x 4 cm)

4. SAFETY INSTRUCTIONS

- Do not attempt to disassemble or modify the solar panel or its components.
- Avoid exposing the solar panel to extreme physical impact or sharp objects.
- Ensure all connections are secure before use to prevent electrical hazards.
- Keep the solar panel and accessories away from water or excessive moisture unless specifically designed for such conditions. This product is not waterproof.
- Do not touch the electrical contacts with bare hands when the panel is exposed to sunlight.
- Store the product in a cool, dry place when not in use.

5. SETUP

Follow these steps to set up your Brnnoo solar panel kit:

1. **Unpack Components:** Carefully remove all items from the packaging.
2. **Position the Solar Panel:** Place the solar panel in a location with direct sunlight. Ensure no shadows are cast on the panel for optimal performance. The panel can be angled towards the sun for maximum efficiency.



Figure 5.1: The monocrystalline solar panel should be placed in direct sunlight.

3. Connect to Device:

- **Using the Clip Wire:** Connect the red alligator clip to the positive (+) terminal and the black alligator clip to the negative (-) terminal of your 12V battery or device. Ensure correct polarity.
- **Using the Car Charger Adapter:** Plug the DC output of the solar panel into the car charger adapter, then insert the adapter into your vehicle's 12V cigarette lighter socket.
- **Using the Double Ended Line:** Connect the DC output of the solar panel to a compatible 12V device using the double-ended DC cable.

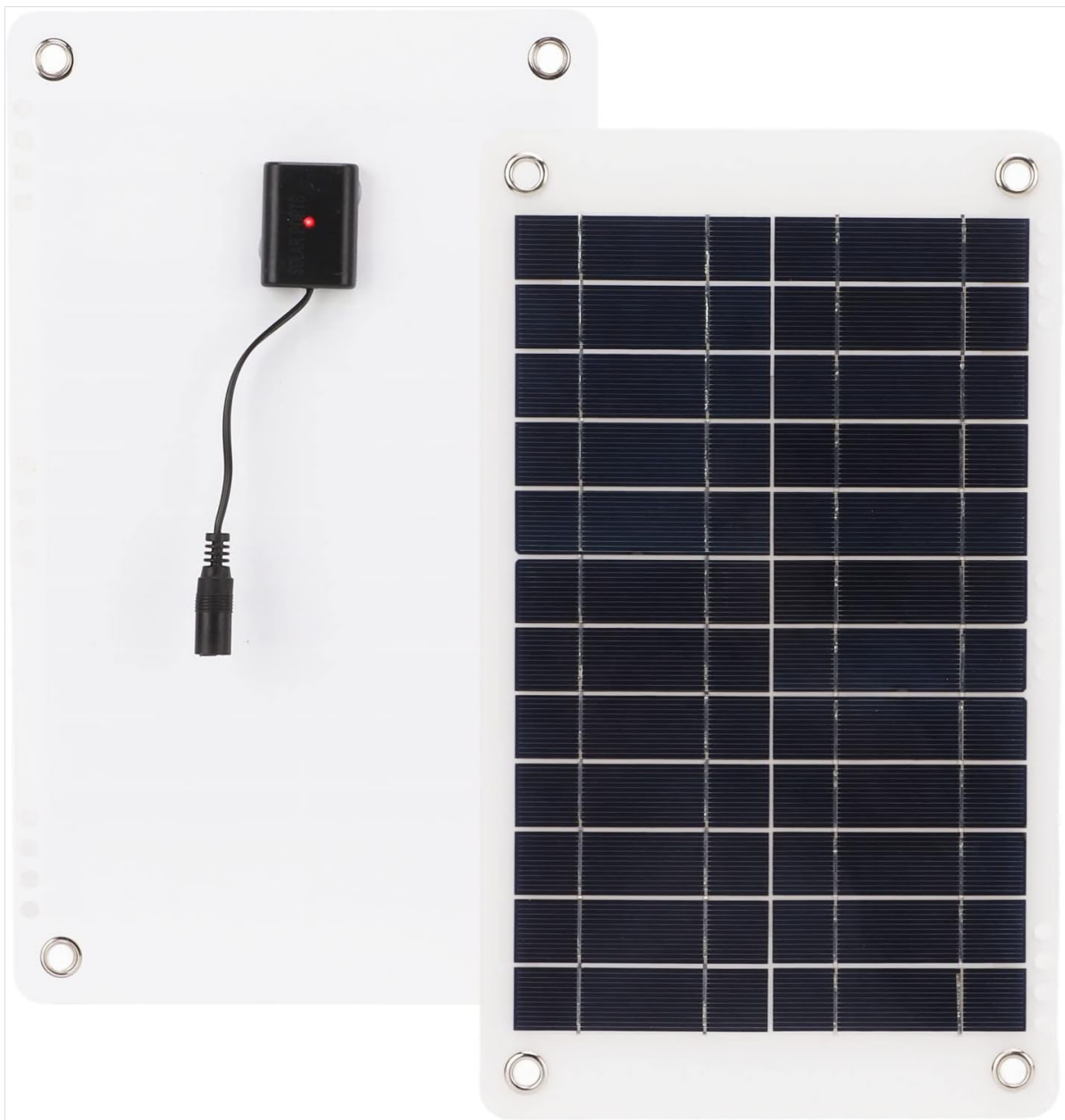


Figure 5.2: The solar panel features a DC output cable, often connected to a small controller or directly to accessories.

4. **Verify Connection:** Once connected, the device should begin charging or operating, depending on its function. Some devices may have an indicator light.

6. OPERATION

The Brnnoo solar panel operates by converting sunlight into electrical energy. For optimal performance:

- **Direct Sunlight:** Always ensure the solar panel is exposed to direct, unobstructed sunlight. Clouds, shade, or dirt on the panel will reduce its efficiency.
- **Angle Adjustment:** For best results, especially during different times of the day or seasons, adjust the angle of the panel to face the sun directly.
- **Continuous Monitoring:** Periodically check the charging status of your connected device to ensure proper operation.

7. MAINTENANCE

Regular maintenance ensures the longevity and efficiency of your solar panel:

- **Cleaning:** Gently wipe the surface of the solar panel with a soft, damp cloth to remove dust, dirt, or debris. Avoid abrasive cleaners or harsh chemicals.
- **Inspection:** Periodically inspect the panel and all cables for any signs of damage, wear, or loose connections.
- **Storage:** When not in use for extended periods, disconnect the panel from any devices and store it in a dry, protected area away from direct sunlight and extreme temperatures.

8. TROUBLESHOOTING

If you encounter issues with your solar panel kit, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No power output / Device not charging	<ul style="list-style-type: none"> ◦ Insufficient sunlight ◦ Panel surface is dirty ◦ Loose or incorrect connections ◦ Damaged cable or panel 	<ul style="list-style-type: none"> ◦ Relocate panel to direct sunlight ◦ Clean the panel surface ◦ Check all connections for security and correct polarity ◦ Inspect for visible damage; contact support if damaged
Low power output	<ul style="list-style-type: none"> ◦ Partial shading on the panel ◦ Panel not optimally angled ◦ Overcast weather conditions 	<ul style="list-style-type: none"> ◦ Ensure no shadows fall on the panel ◦ Adjust panel angle towards the sun ◦ Output will naturally be lower in cloudy conditions

9. WARRANTY AND SUPPORT

Brrnoo products are manufactured with quality and reliability in mind. For specific warranty details, please refer to the documentation provided at the time of purchase or contact your retailer. If you experience any issues or require technical assistance, please contact Brrnoo customer support through the vendor's contact information or the platform where the product was purchased.

For more information about Brrnoo products, visit the official [Brrnoo Store on Amazon](#).