Saved from manuals.plus.
Open the live page for links to other documents and user manuals.

JJN JJN-SP-200W-N-2

JJN Bifacial 400W N-Type Solar Panel (2x 200W) Instruction Manual

Model: JJN-SP-200W-N-2 | Brand: JJN

1. Introduction

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your JJN Bifacial 400W N-Type Solar Panel system. This system consists of two 200W monocrystalline solar panels designed for various off-grid applications, including RVs, homes, farms, trailers, campers, and marine setups. Please read this manual thoroughly before proceeding with installation or use.

2. Safety Information

Warning: Solar panels generate electricity when exposed to light. Always handle with care and follow all safety precautions to prevent electric shock or injury.

- Do not attempt to disassemble or modify the solar panels.
- Avoid touching electrical terminals when panels are exposed to light.
- Wear appropriate personal protective equipment (PPE), including insulated gloves and eye protection, during installation.
- Ensure all wiring is correctly polarized and securely connected to prevent damage to the panels or connected equipment.
- Do not walk on or place heavy objects on the solar panels.
- Keep panels away from flammable gases or vapors.
- Consult a qualified electrician for complex installations or if you are unsure about any step.

3. Package Contents

Verify that all items are present and undamaged upon unpacking:

- 2 x JJN 200W Bifacial N-Type Solar Panels
- Drain Clips (included for improved water flow)
- PV Connectors (MC4 type, pre-attached)



Image: Two JJN 200W Bifacial N-Type Solar Panels, showing the front and back design.

4. Setup and Installation

Proper installation is crucial for optimal performance and longevity.

4.1 Site Selection

- Choose a location that receives maximum direct sunlight throughout the day, free from shading by trees, buildings, or other obstructions.
- For bifacial panels, consider surfaces that can reflect light onto the rear side of the panel to maximize energy generation.
- Ensure the mounting surface is structurally sound and can support the weight of the panels (approximately 23.15 lbs per panel, total 46.3 lbs for the pair).

4.2 Mounting

- The panels feature pre-drilled holes on the black corrosion-resistant aluminum frame for easy mounting.

- Use appropriate mounting hardware (not included) suitable for your specific application (e.g., roof mounts for RVs, ground mounts for off-grid systems).
- Ensure panels are securely fastened to withstand wind loads up to 2400Pa and snow loads up to 5400Pa.
- Maintain adequate spacing between panels and the mounting surface to allow for airflow and rear-side light exposure for bifacial operation.

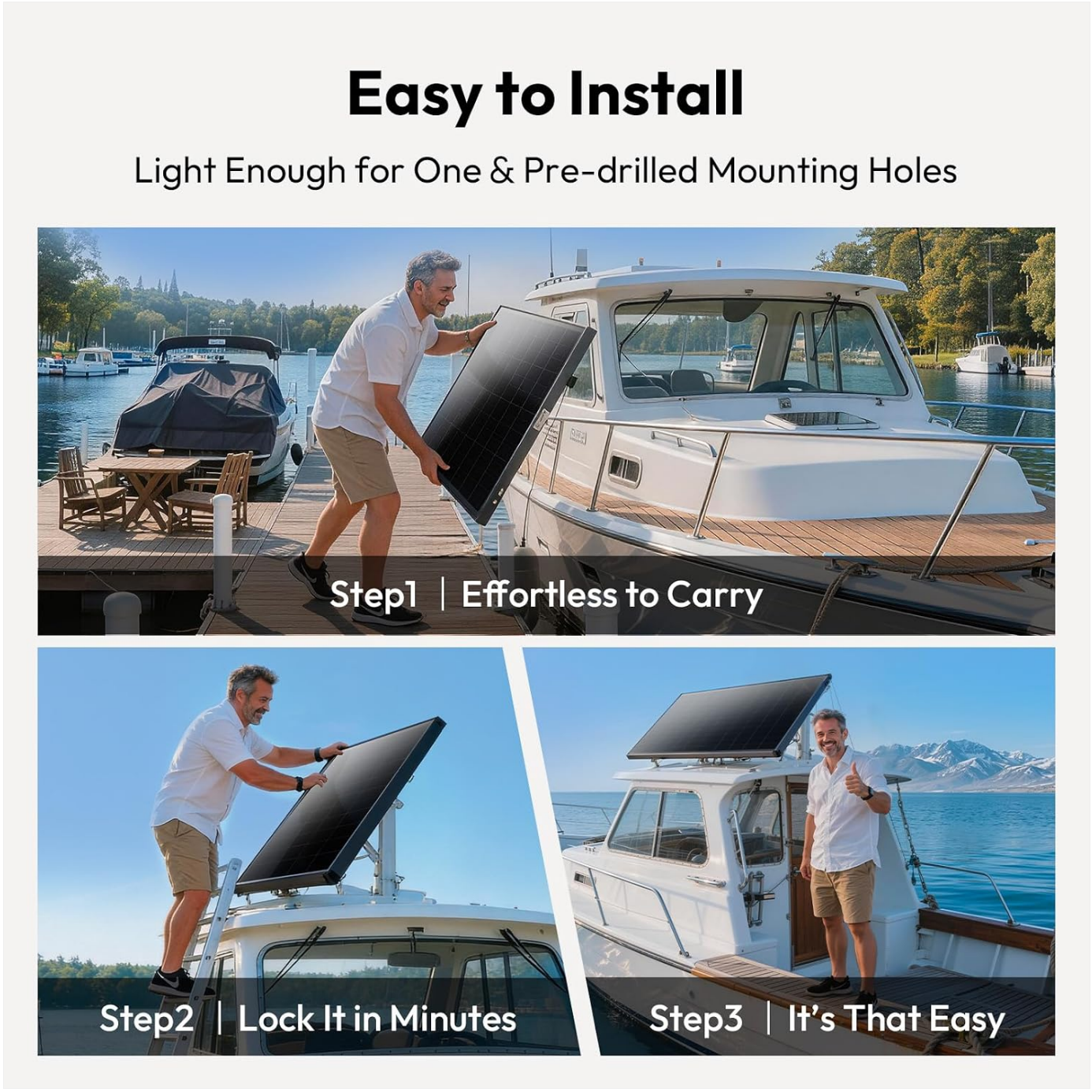


Image: Illustration of easy installation steps for a solar panel on a boat.

4.3 Electrical Connections

- Connect the MC4 connectors from the solar panels to your charge controller. Ensure correct polarity (positive to positive, negative to negative).
- The panels can be wired in series or parallel depending on your system's voltage and current requirements. Consult your charge controller's manual for recommended configurations.
- The IP67 solar connectors and IP65 junction box provide protection against environmental elements. Ensure all connections are tight and sealed.
- Use appropriately sized wiring (12 AWG recommended) to minimize voltage drop.

5. Operating Instructions

Your JJN Bifacial N-Type Solar Panels are designed for high efficiency and reliable power generation.

5.1 Power Generation

- These bifacial panels generate electricity from both the front and back surfaces. Maximize exposure to direct sunlight on the front and reflected light on the rear.
- The advanced 16BB N-type solar cells contribute to over 25% high efficiency, providing more power output compared to conventional cells.
- The panels are designed to perform well even in low-light conditions and are less affected by shading due to their cell design.



Image: Triple-cut cell design benefits, showing long-term power retention.



Image: Illustration of 25% efficiency with 16BB N-Type cells.

5.2 System Integration

Connect the solar panels to a compatible charge controller and battery bank. The charge controller regulates the voltage and current from the panels to safely charge your batteries and power your devices. Refer to your charge controller and inverter manuals for specific operational guidelines.

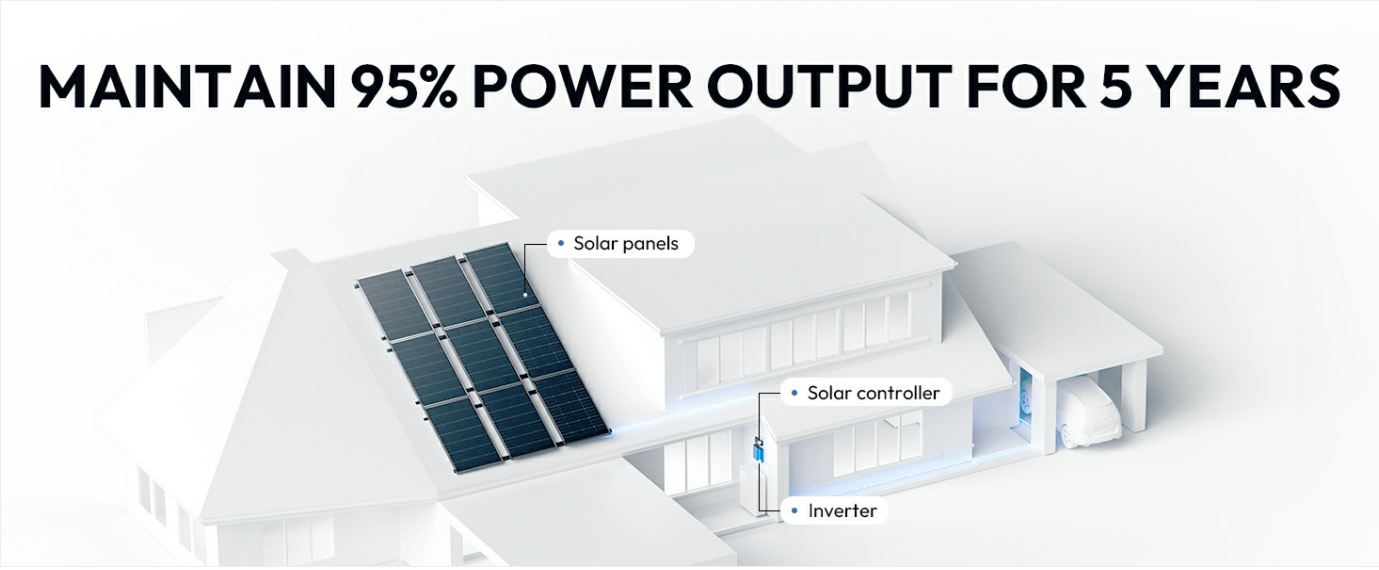


Image: Diagram of a solar panel system integrated into a home, showing panels, controller, and inverter.

6. Maintenance

Regular maintenance ensures optimal performance and extends the lifespan of your solar panels.

- **Cleaning:** Periodically clean the panel surfaces with a soft cloth and water to remove dust, dirt, leaves, and other debris that can reduce efficiency. Avoid abrasive cleaners or harsh chemicals.
- **Drain Clips:** The included drain clips help improve water flow and minimize light obstruction from accumulated water or dirt on the panel edges. Ensure they are properly installed and clear of debris.
- **Inspection:** Regularly inspect the panels for any physical damage, such as cracks in the glass, loose frames, or damaged wiring. Check all electrical connections for corrosion or looseness.
- **Shading:** Ensure no new obstructions are causing shading on the panels. Even partial shading can significantly reduce output.



Image: Drain clips on a solar panel, demonstrating improved water flow and reduced light obstruction.

7. Troubleshooting

If your solar panel system is not performing as expected, consider the following common issues:

- **No Power Output:**
  - Check all MC4 connections for secure and correct polarity.
  - Ensure the charge controller is properly connected and functioning.
  - Verify that the panels are receiving adequate sunlight and are not shaded.
  - Inspect for any visible damage to the panel or wiring.
- **Low Power Output:**
  - Clean the panel surfaces to remove dirt, dust, or debris.
  - Check for partial shading from nearby objects.
  - Confirm the angle and orientation of the panels are optimized for the sun's position.

- Verify that the ambient temperature is within the optimal operating range. High temperatures can slightly reduce efficiency.

- **Flickering Output:**
  - Inspect for loose or intermittent electrical connections.
  - Check for unstable shading conditions (e.g., moving clouds, tree branches).

If issues persist after performing these checks, consult a qualified solar technician.

8. Specifications

Technical specifications for the JJN 200W N-Type Bifacial Solar Panel (per panel):

Feature	Value
Model Number	JJN-SP-200W-N-2 (for 2 panels)
Maximum Power (Pmax)	200W (per panel) / 400W (total for 2 panels)
Cell Type	16BB N-Type Monocrystalline
Efficiency	>25%
Open Circuit Voltage (Voc)	28.1V
Optimum Operating Voltage (Vmp)	23.4V
Short Circuit Current (Isc)	9.12A
Optimum Operating Current (Imp)	8.55A
Product Dimensions (L x W x H)	53.7" x 30.3" x 1.2" (136.4cm x 77cm x 3cm)
Item Weight	23.15 lbs (10.5 kg) per panel / 46.3 lbs (21 kg) for 2 panels
Material	Aluminum, Monocrystalline Silicon, Tempered Glass
Operating Temperature	-40°F to 194°F (-40°C to +90°C)
Connector Type	MC4
Junction Box Rating	IP65 Waterproof
Connector Rating	IP67 Waterproof
Wind Load Resistance	2400Pa
Snow Load Resistance	5400Pa

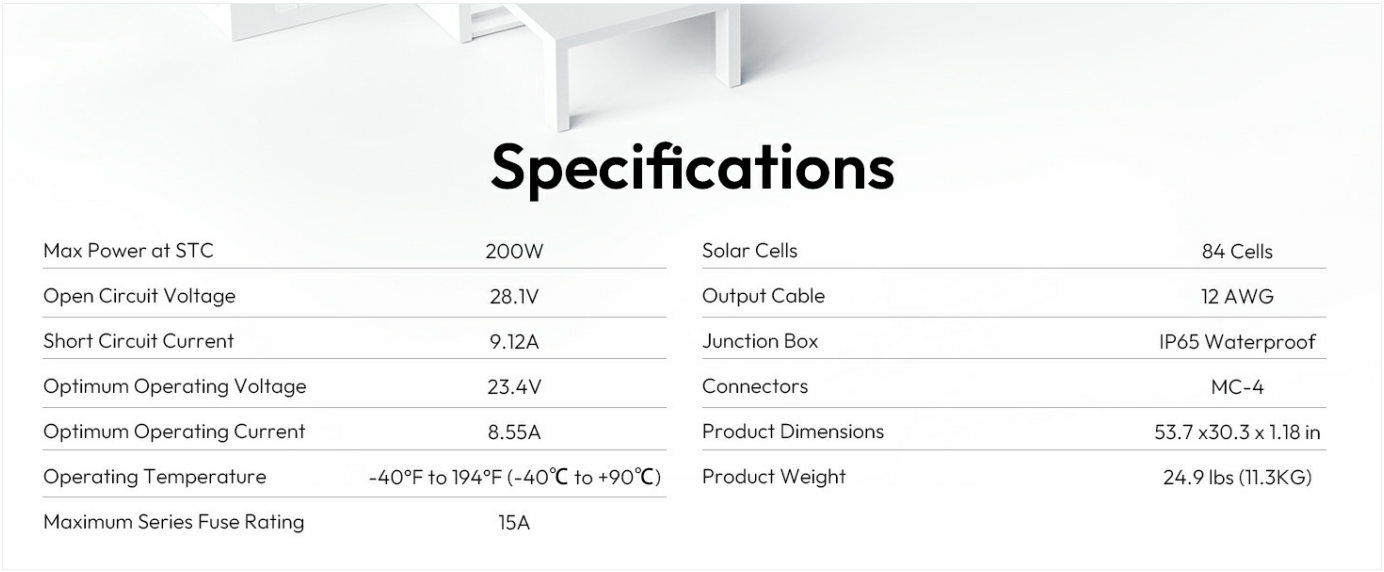


Image: Detailed specifications for the 200W solar panel.

9. Warranty and Support

9.1 Warranty Information

JJN Solar offers an industry-leading warranty for its bifacial solar panels:

- **10-Year Workmanship Warranty:** Covers defects in materials and manufacturing.
- **30-Year Output Warranty:** Guarantees over 88.9% of the rated power output at 30 years.

Please retain your proof of purchase for warranty claims. The warranty is subject to the terms and conditions outlined by JJN Solar.

9.2 Customer Support

For technical assistance, warranty inquiries, or further information, please contact JJN customer support through the retailer where the product was purchased or visit the official JJN website.

© 2024 JJN. All rights reserved.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for

conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

Open the live page

https://manuals.plus/asin/B0DWF27PWF

More documents and user manuals: **https://manuals.plus/**