

DOKIO Solarpanel -220w

DOKIO 200W 18V Portable Solar Panel Kit Instruction Manual

Model: Solarpanel -220w

Brand: DOKIO

INTRODUCTION

This manual provides essential information for the safe and efficient operation of your DOKIO 200W 18V Portable Solar Panel Kit. Please read it thoroughly before use to ensure proper setup, operation, and maintenance.

Key Features:

- **Foldable and Lightweight:** Packs 200W of power, yet is only 1.1 inches (2.8 cm) thick and weighs 11.7 lbs (5.3 kg), making it easy to mount, transport, and store.
- **Complete Kit:** Solar charger for all 12V batteries and compatible with most power stations (e.g., Jackery, Goal Zero, Ecoflow, Paxcess).
- **High Efficiency:** Features high-efficiency monocrystalline solar cells for greater power output even from a smaller panel.
- **Built-in Protection:** Includes protection against overcharging, overload, and short-circuit.
- **Versatile Connectivity:** Comes with various connectors including SAE, XT60, DC, and Alligator clips for wide compatibility.

SETUP GUIDE

Unpacking and Inspection

Carefully unpack all components and inspect for any damage. Ensure all items listed below are present.

Included Components:

Component	Quantity
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Component	Quantity
220W solar panel	1
Cable (JY60 to DC)	1
Cable (XT60 to Alligator clip)	1
20A controller	1
9.8FT cable (SAE to XT60)	1



Figure 1: DOKIO 200W Portable Solar Panel Kit with all included accessories.

Deployment

Unfold the solar panel completely. For optimal performance, position the panel directly facing the sun. The panel's slim design allows for easy setup and portability.



		  
Maximum power	Pmax	220 W $\pm$ 3%
Open circuit voltage	(V _{oc})	22.50 V
Maximum power voltage	(V _{mp})	18.00 V
Short-circuit current	(I _{sc})	12.36A
Maximum power current	(I _{mp})	12.22 A
Net Weight		5.3 kg (11.7 lb)
Unfolded Dimensions		216 x 73 cm / 85 x 29 inch

Figure 2: Folded and unfolded dimensions of the DOKIO 200W solar panel, highlighting its slim profile for easy transport.

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Video 1: Demonstrates the easy setup and deployment of the DOKIO solar panel, showing its portability and quick unfolding process.

Connecting to a Power Station

Connect the SAE connector from the solar panel to the provided XT60 to DC cable. Then, connect the appropriate DC connector (from the included adapters) to your power station's input port. No controller is needed for this setup.

Connecting to a 12V Battery

Connect the solar panel's SAE connector to the 9.8FT SAE to XT60 cable. Then, connect the XT60 end to the 20A controller. Finally, use the XT60 to Alligator clip cable to connect the controller to your 12V battery (AGM, LiFePo4, Deep cycle batteries).

WHY CHOOSE DOKIO SOLAR PANEL?



	DOKIO 220W	OTHER 200W
Brand	 Founded in 2007	 Newly created
Price	 Affordable	 Expensive
Controller	 LCD Smart	 Basic Controller
Weight	 10lb (4kg)	 20lb (9kg)
Thickness	 0.9" (2.2cm)	 3" (7.6cm)

Figure 3: Connection diagrams for charging both power stations and 12V batteries using the DOKIO solar panel kit.

OPERATING INSTRUCTIONS

Understanding the Solar Charge Controller

The 20A solar charge controller manages the power flow from the solar panel to your battery, preventing overcharging and ensuring efficient charging. It features an LCD display for monitoring key parameters.

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Video 2: Detailed guide on how to operate and interpret readings from the DOKIO solar charge controller, including battery voltage and charging current.

Testing Power Output

To accurately measure the power output of your solar panel, it is recommended to use a multimeter. Ensure the panel is in full direct sunlight for the most accurate readings.

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Video 3: Instructions on how to test the solar panel's power output using a multimeter to verify performance.

Optimizing Performance

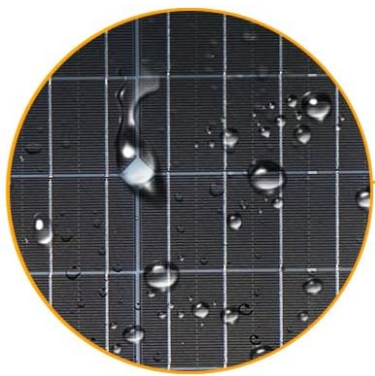
Factors such as shading and the angle of the sun can significantly affect the solar panel's output. Minimize shading and adjust the panel's angle to be perpendicular to the sun's rays for maximum efficiency.

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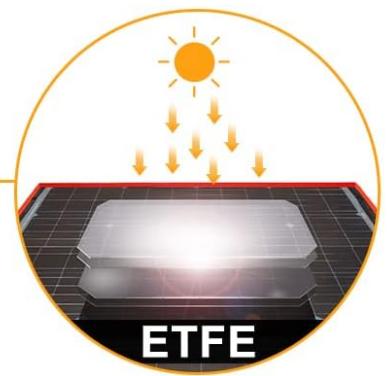
Video 4: Explains common reasons for low power output and provides tips to optimize solar panel performance by adjusting angle and avoiding shade.

Applications

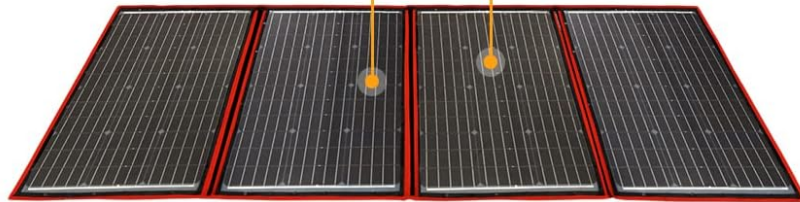
The DOKIO 200W Portable Solar Panel Kit is ideal for various outdoor and emergency scenarios, including RVs, camping, marine use, and as an emergency power source.



IP65 Waterproof



High transparency



Carrying Bag



Handle

Figure 4: Illustrates the diverse applications for the DOKIO 200W Portable Solar Panel Kit, from camping to emergency preparedness.

MAINTENANCE

Cleaning

Regularly clean the surface of the solar panels with a soft, damp cloth to remove dust, dirt, and debris. Avoid abrasive materials or harsh chemicals that could scratch the surface.

Storage

When not in use, fold the solar panel and store it in a dry, cool place away from direct sunlight and extreme temperatures. Ensure the panel is clean before storage.



		  
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Figure 5: The DOKIO solar panel's compact folded size allows for easy storage in various spaces, including a car trunk.

Water Resistance

The solar panel features an IP65 waterproof rating, making it resistant to splashes and light rain. However, it is not designed for submersion in water.

TROUBLESHOOTING

Low Power Output

- **Check for Shading:** Ensure no objects (trees, buildings, etc.) are casting shadows on the panel. Even partial shading can significantly reduce output.
- **Adjust Angle:** Re-position the panel to face the sun directly. The optimal angle is 90 degrees to the sun's rays.
- **Clean Panel Surface:** Dust, dirt, or debris on the panel can block sunlight. Clean the surface as described in the Maintenance section.
- **Verify Connections:** Ensure all cables and connectors are securely attached and free from damage.

- **Power Station Input Limits:** Some power stations have input limits. The actual power received by the power station might be lower than the panel's maximum output if the power station's input limit is lower.

Controller Display Issues

- **No Display:** Ensure the battery is connected correctly and has sufficient charge. The controller requires a minimum battery voltage to operate.
- **Incorrect Readings:** Verify that the battery type setting on the controller matches your connected battery (AGM, FLD, Lithium, etc.).

SPECIFICATIONS

Feature	Detail
Brand	DOKIO
Model	Solarpanel -220w
Maximum Power	220 Watts
Maximum Voltage	18 Volts
Material	Monocrystalline Silicon
Product Dimensions (Unfolded)	26.4"L x 19.3"W x 1.1"H
Folded Size	19.3" x 26.4" x 1.1"
Item Weight	9 Pounds
Efficiency	High Efficiency
Connector Type	SAE/XT60/DC/Alligator clip
Color	Red + Black

WARRANTY AND SUPPORT

Warranty Information

This DOKIO product comes with a 1-year warranty from the date of purchase. Please retain your proof of purchase for warranty claims.

Customer Support

For further assistance, technical support, or warranty inquiries, please contact DOKIO Solar US customer service. You can also visit the official DOKIO store for more information and resources.

[Visit DOKIO Store](#)

