

User Manual for ROCKSOLAR 0.4HP Solar Powered Submersible Pump Kit



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1. Introduction

Thank you for purchasing the ROCKSOLAR 0.4HP Solar Powered Submersible Pump Kit. This kit is designed for efficient and reliable water pumping in remote and off-grid locations. It integrates solar panels, a charge controller, and a submersible pump for seamless operation.

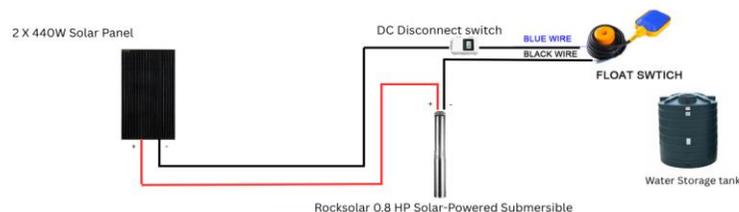
2. Package Contents

- - 1 x 0.4HP Submersible DC Water Pump
- - 1 x 440W Solar Panels
- - 1 x 2 String waterproof DC disconnect box with 1000V 40A Circuit Breaker
- - 1 x Mounting Bracket Set
- - 1 x 10ft Extension Cable with MC4 Connectors
- - 1 x User Manual

3. Safety Instructions

- - Ensure installation is done in dry weather.
- - Disconnect power during installation and maintenance.
- - Keep children and unauthorized persons away from the system.
- - Use insulated tools and protective gear during setup.
- - Ensure correct polarity when making electrical connections.
- - Never operate the pump dry; it must be fully submerged.

4. Installation Guide



Step 1: Check Polarity

Identify the positive (+) and negative (-) terminals of the solar panels.

Identify the corresponding positive (+) and negative (-) wires on the pump.

Step 2: Connect the Solar Panels to the Pump

Use the provided extension cables to connect the solar panel output directly to the pump input.

Match positive (+) from the solar panel to positive (+) on the pump.

Match negative (-) from the solar panel to negative (-) on the pump.

Use MC4 connectors for secure, waterproof connections.

Step 3: Secure the Pump

Fully submerge the pump into your water source (well, pond, or tank).

Use a rope or stainless-steel cable to keep it suspended in the water and avoid it resting on the bottom where debris could clog the intake.

Step 4: (Optional Float Switch Connection)

If a float switch is included, connect it to the pump circuit following the same polarity to enable automatic water level control in your storage tank.

5. System Operation

- - To start the system, ensure all wiring is properly connected.
- - Turn on the charge controller.
- - The pump will operate automatically when there is sufficient solar power.
- - Use the float switch to control the water level in the tank.

6. Maintenance Guidelines

- - Clean solar panels monthly for optimal efficiency.
- - Inspect wiring connections periodically for corrosion.
- - Clean the pump's intake screen every 3-6 months.
- - Check battery terminals for tightness and corrosion.

7. Technical Specifications

- - Pump Power: 0.4HP (300W)
- - Max Flow Rate: 15.41 GPM at minimum head
- - Max Head: 131 feet
- - Operating Voltage: 20-48V DC
- - Recommended Solar Panel Capacity: 440W

8. Warranty & Support

For warranty and support, please contact ROCKSOLAR Customer Support.

Website: <https://rocksolar.ca/> for Canada, <https://rocksolar.io/> for USA

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