We know you care.

Choosing to go solar is a huge step toward being sustainable. Go green with Renogy without compromising on a comfortable lifestyle.

GO SOLAR

RENOGY®

Solar 200W 2.4kWh Extension Solution

QUICK GUIDE
VERSION A0

Find Your Energy Freedom
Before Getting Started

The quick guide provides important installation instructions for Renogy Solar 200W 2.4kWh Extension Solution. For detailed operation and maintenance tips, refer to the user manual of the specific product at renogy.com/support/downloads.

Read the quick guide carefully before installation. Failure to observe the instructions or precautions in the quick guide can result in electrical shock, serious injury, or death, or can damage the included products, potentially rendering them inoperable.

- Renogy ensures the accuracy, sufficiency, and the applicability of information in the quick guide or user manual at the time of printing due to continual product improvements that may occur.
- Renogy assumes no responsibility or liability for personal and property losses, whether directly and indirectly, caused by the user’s failure to install and use the product in compliance with the quick guide.
- Renogy is not responsible or liable for any failure, damage, or injury resulting from repair attempts by unqualified personnel, improper installation, or inappropriate operation.
- The illustrations in the quick guide are for demonstration purposes only. Details may appear slightly different depending on product revision and market region.
- Renogy reserves the right to change the information in the quick guide without notice. For the latest quick guide, visit renogy.com/support/downloads.

Disclaimer

Renogy Solar 200W 2.4kWh Extension Solution Quick Guide © 2023 Renogy. All rights reserved.

RENOGY and RENOGY are registered trademarks of Renogy.

- All information in the quick guide is subject to copyright and other intellectual property rights of Renogy and its licensors. The quick guide may not be modified, reproduced, or copied, in whole or in part, without the prior written permissions of Renogy and its licensors.
- The registered trademarks in the quick guide are the property of Renogy. The unauthorized use of the trademarks is strictly prohibited.

Statutes and Regulations

The mechanical and electrical installation of solar panels should refer to the appropriate regulations, including electrical code, building code and electrical connection requirements. These regulations vary depending on the location of the installation, e.g., building rooftop installation, vehicle-mounted applications, etc. Requirements may also vary with the voltage of the installation system, the nature of the current (DC or AC). Please contact your local authority for specific terms.

DC Home App

[QR code for DC Home App]

Download on the
Google Play

[Icon for Google Play]

Download on the
App Store

[Icon for App Store]
1. System Wiring

- 200Ah AGM Battery × 1
- 10 AWG 2 ft ANL Fuse Cable × 1
- 30A ANL Fuse × 1

2. Get to Know Renogy Solar 200W 2.4kWh Extension Solution

- **Battery**
  - 200Ah AGM Battery × 1

- **Charge Controller**
  - 30A PwM Flush Mount Charge Controller × 1
  - 12 AWG 8 ft Tray Cables (Charge Controller to Battery) × 1
  - Renogy BT-1 Bluetooth Module (New Version) × 1
  - 10 AWG 2 ft ANL Fuse Cable × 1
  - 30A ANL Fuse × 1

---

---
### Solar Panels

- **200W Rigid Solar Panel × 1**
- **15A Solar Connector Fuse × 1**
- **12 AWG 10 ft Adapter Kit (Solar Panel to Charge Controller) × 1**
- **Solar Panel Mounting Z Bracket × 1**
- **Solar Entry Gland × 1**

### Inverter

- **1000W Inverter × 1**
- **100A ANL Fuse × 1**
- **4 AWG 5 ft Battery Inverter Cables (Inverter to Battery) × 1**
- **4 AWG 2 ft ANL Fuse Cable × 1**
3. Required Tools & Accessories

- Phillips Screwdriver (#2)
- Wrench (7/16 in)
- Wrench (9/16 in)
- Impact Drill
- Phillips Driver Bit (#2)
- Masonry Drill Bit (21/64 in)
- Wire Stripper
- Ground Fault Circuit Interrupter (GFCI) (≥10A)
- MS Adhesive and MS Applicator Gun
- Slootted Screwdriver (4 mm)
- Insulating Gloves
4. How to Install the Solar Panel Mounting Z Bracket

1. Position the Z Bracket on the mounting surface.
2. Attach the Z Bracket with screws.
3. Tighten the screws to 70.8-106.2 in-lbs (8-12 N·m).

[Diagram showing steps 1-3 with a solar panel mounted on a vehicle roof.]
5. How to Install the Solar Entry Gland

1. Drill a hole in the RV roof.
2. Run the Adapter Kit through the hole.
3. Apply MS adhesive to the entry gland.
4. Do not move the entry gland before the MS adhesive is fully dry.

Solar Entry Gland

- 07 -
Step 1. Connect the Charge Controller to the Battery

**Note:** Connect the battery first and then the solar panel to avoid irreversible damage to the charge controller.

**STEP-1 Install the cables on the charge controller.**

1. Open
2. Closed

**STEP-2 Install a 30A ANL fuse**

- 0.4 in (10 mm)
- 70.8 in·lbs (8 N·m)

**STEP-3 Install the cables on the battery.**

1. 88.5 in·lbs (10 N·m)
2. 88.5 in·lbs (10 N·m)

- 88.5 in·lbs (10 N·m)
- 80.8 in·lbs (9 N·m)
Step 2. Connect the Bluetooth Module to the Charge Controller

BT-1 Bluetooth Module

30A PWM Flush Mount Charge Controller

My Renogy

Add Devices

RNG-CTRL-ADV

Cancel Confirm

PV Screen

0 V 0 A 0 W 0.052 kwh

No Device yet...

History

PV Watts Produced

RNG-CTRL-ADV30
Step 3. Connect the Solar Panel to the Charge Controller

**Note:** Connect the battery first and then the solar panel to avoid irreversible damage to the charge controller.

**STEP-1 Install a 15A Solar Connector Fuse**

**STEP-2 Install the adapter kit on the solar panel.**

1. Negative Solar Panel → Adapter Kit
2. Positive Solar Panel → Adapter Kit

**STEP-3 Install the adapter kit on the charge controller.**

1. Open
2. Closed

**12 AWG 10 ft Adapter Kit**

**200W Rigid Solar Panel**

**15A Solar Connector Fuse**

**30A PWM Flush Mount Charge Controller**
Step 4. Install the Inverter and Loads

STEP-1 Install the cables on the battery.

88.5 in-lbs (10 N·m)

STEP-2 Install a 100A ANL fuse

88.5 in-lbs (10 N·m)

STEP-3 Install the cables on the inverter.

70.8 in-lbs (8 N·m)

STEP-4 Install the GFCI on the inverter.

200Ah AGM Battery

4 AWG 2 ft ANL Fuse Cable

100A ANL Fuse

4 AWG 5 ft Battery Inverter Cables

1000W Inverter

Ground Fault Circuit Interrupter

AC Loads (120V Single Phase, 1000W Max.)
Safety Information

General
- Wear proper protective equipment and use insulated tools during installation and operation. Do not wear jewelry or other metal objects when working on or around the devices.
- Keep the devices out of the reach of children.
- Do not dispose of the devices as household waste. Comply with local, state, and federal laws and regulations and use recycling channels as required.
- In case of fire, put out the fire with a FM-200 or CO₂ fire extinguisher.
- Installing the devices improperly on a boat may cause damage to components of the boat. Have the devices installed by a qualified electrician.
- Do not expose the devices to flammable or harsh chemicals or vapors.
- Clean the devices regularly.
- Do not puncture, drop, crush, penetrate, shake, strike, or step on the devices.
- Do not open, disassemble, repair, tamper with, or modify the devices.
- Connect the negative prior to the positive terminal when connecting any device.

Battery Safety
- Do not use the battery if there is any damage.
- Do not touch the exposed electrolyte or powder if the battery is damaged.
- Risk of explosion! Never install the charge controller and inverter in a sealed enclosure with flooded batteries! Do not install the charge controller, and inverter in a confined area where battery gases can accumulate.

Charge Controller and Inverter Safety
- Install the devices indoors on a vertical surface - protected from direct sunlight, high temperatures, and water. Make sure there is good ventilation.
- Keep the devices away from heating equipment.
- Do not insert foreign objects into the devices.
- Confirm the polarities of the devices before connection. A reverse polarity contact can result in damage to the devices, thus voiding the warranty.
- Do not touch the connector contacts while the devices are in operation.
- Disconnect all connectors from the devices before maintenance or cleaning.
- Ensure the inverter is firmly grounded to a building, vehicle, or earth grounded. Keep the inverter away from EMI receptors such as TVs, radios, and other audio/visual electronics to prevent damage / interference to the equipment.

Solar Panel Safety
- Do not install the solar panel on a surface constructed from combustible material.
- Do not expose the solar panel to direct flame or heat sources.
- Keep the solar panel away from explosives and corrosive substances.
- Do not step, walk, stand, or jump on the solar panel. Localized heavy loads may cause damage to the solar cells, which will ultimately compromise the performance of the solar panel.
- Do not band the solar panel. Bending the solar panel will cause damage to the cells and affect panel performance.
- Do not immerse the solar panel in water.
Renogy Empowered

Renogy aims to empower people around the world through education and distribution of DIY-friendly renewable energy solutions.

We intend to be a driving force for sustainable living and energy independence.

In support of this effort, our range of solar products makes it possible for you to minimize your carbon footprint by reducing the need for grid power.

Live Sustainably with Renogy

Did you know? In a given month, a 1kW solar energy system will...

- Save 170 pounds of coal from being burned
- Save 300 pounds of CO₂ from being released into the atmosphere
- Save 105 gallons of water from being consumed

Renogy Power PLUS

Renogy Power Plus allows you to stay in the loop with upcoming solar energy innovations, share your experiences with your solar energy journey, and connect with like-minded people who are changing the world in the Renogy Power Plus community.

@Renogy Solar @renogyofficial @Renogy

Renogy reserves the right to change the contents of this quick guide without notice.