RENOGY RMS-DCDC-JP

Renogy RMS-DCDC-JP MPPT Charge Controller Monitor Instruction Manual

Model: RMS-DCDC-JP | Brand: RENOGY

1. INTRODUCTION

The Renogy RMS-DCDC-JP is a high-precision monitor specifically designed for Renogy MPPT charge controllers. It provides a clean and professional interface for monitoring your charging system. This monitor can be flush-mounted and features a backlit LCD display. With its four intuitive buttons, users can easily view critical system information, including charging parameters and error codes. It offers real-time feedback for two battery systems, ensuring you have the most current status of your power setup.

Image: The Renogy RMS-DCDC-JP monitor displaying system information, shown with and without its backlight activated.

2. KEY FEATURES

- **Two Battery System Monitoring:** Continuously track the charging status of both main and sub-batteries, providing a comprehensive overview of your solar system's health.
- **Adjustable Parameters:** Modify charging voltage, charging current, and other settings directly through the monitor interface.
- **Simple Connection:** Connects directly to the DCC charge controller via an RJ45 cable for immediate use.
- **Accurate Measurements:** Provides real-time charging information from both solar panels and the alternator with high accuracy.
- **Compatibility:** Designed for use with DCC Charge Controllers 12V 30A MPPT (RBC30D1S-JP) and DCC Charge Controllers 12V 50A MPPT (RBC50D1S-JP).

3. PACKAGE CONTENTS

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

- LCD Monitor (x1)

- English Instruction Manual (x1)

- Communication Cable (CAT5, 5m) (x1)

- Mounting Screws (M2.9x13) (x4)

Image: All components included in the RMS-DCDC-JP product package.

4. SETUP AND INSTALLATION

4.1 Physical Installation

The RMS-DCDC-JP monitor is designed for flush mounting. Ensure you have adequate space behind the mounting surface for the monitor's body and cable connections. Use the provided mounting screws to secure the monitor in place.
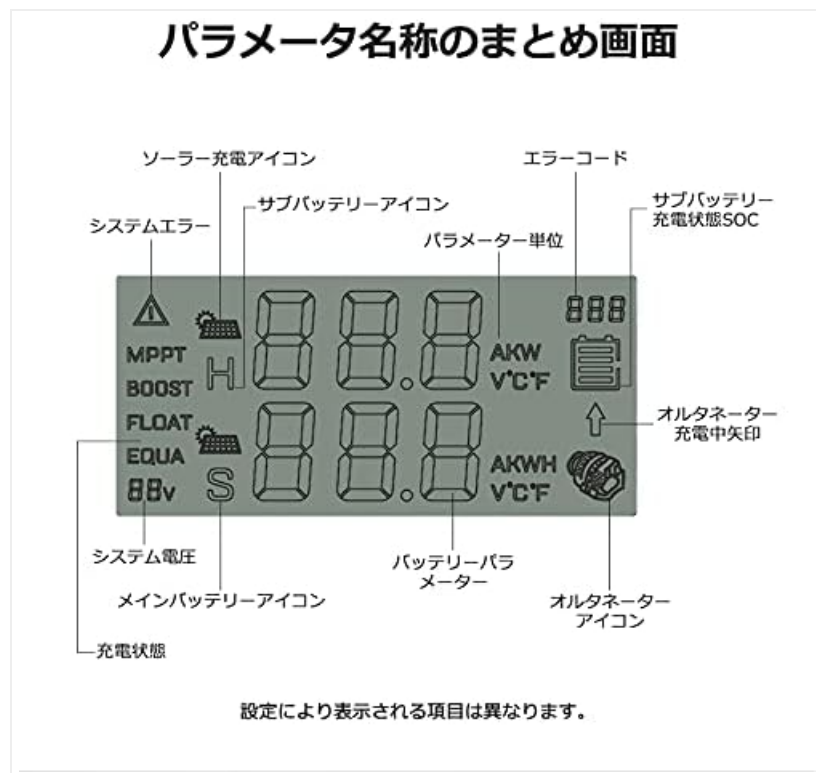
パラメータ名称のまとめ画面

ソーラー充電アイコン
エラーコード
サブバッテリーアイコン
サブバッテリー充電状態SOC
システムエラー
パラメーター単位

MPPT
BOOST
FLOAT
EQUA
88v

AKW
V'C'F

AKWH
V'C'F

オルタネーター充電中矢印

システム電圧
バッテリーパラメーター
メインバッテリーアイコン
オルタネーターアイコン
充電状態

設定により表示される項目は異なります。

Image: Exploded diagram illustrating the monitor's components, including the PVC board, ABS resin covers, and high-resolution display.

4.2 Electrical Connection

Connect the monitor to your Renogy DCC charge controller using the supplied RJ45 communication cable. Simply plug one end of the RJ45 cable into the monitor's port and the other end into the corresponding port on the DCC charge controller. The monitor will power on automatically once connected.

パラメーター設定ボタン

RENOGY
H 13.4 v
S 13.1 v
RMS-DCDC

∧ ∨ ↰ ↵

∧ ページアップボタン
∨ ページダウンボタン
↰ 前のページボタン
↵ Enterボタン/パラメータ設定キー

Image: The RMS-DCDC-JP monitor connected to a Renogy DCC charge controller, showing the RJ45 cable connection.

4.3 Installation Video Guide

Your browser does not support the video tag.

5. OPERATING INSTRUCTIONS

5.1 Display Overview

The LCD display provides real-time information about your battery and charging system. The displayed items may vary based on your system's configuration.

Image: Detailed breakdown of the monitor's display, indicating icons for solar charging, sub-battery, system error, parameter units, alternator, main battery, and charging status.

- **Solar Charge Icon:** Indicates active solar charging.

- **Sub-Battery Icon:** Represents the secondary battery's status.

- **System Error:** Displays error codes if a fault is detected.

- **Parameter Unit:** Shows units for displayed values (e.g., V, A, W, kWh).

- **Alternator Icon:** Indicates charging from the alternator.

- **Main Battery Icon:** Represents the primary battery's status.

- **Charging Status:** Shows the current charging phase (MPPT, Boost, Float, Equalization).

- **System Voltage:** Displays the current system voltage.

- **Battery Parameters:** Shows various battery-related data.

- **Sub-Battery State of Charge (SOC):** Indicates the charge level of the sub-battery.

5.2 Button Functions

The monitor features four buttons for navigation and parameter adjustment.

モニターのみより電流制限設定を実現

モニターを通して、サブバッテリーへの充電電流を制限することができます。

DCC30S	DCC50S
X	50A
X	40A
30A	30A
20A	20A
10A	10A

Image: The four control buttons on the monitor: Page Up, Page Down, Previous Page, and Enter/Parameter Setting Key.

- **Up Arrow (Page Up) Button:** Navigates up through menu options or increases a value.
- **Down Arrow (Page Down) Button:** Navigates down through menu options or decreases a value.
- **Left Arrow (Previous Page) Button:** Returns to the previous screen or menu.
- **Right Arrow (Enter/Parameter Setting Key) Button:** Confirms selections or enters parameter adjustment mode.

5.3 Parameter Adjustment

You can adjust charging current limits for the sub-battery directly from the monitor. This feature allows you to optimize charging based on your battery's specifications and system requirements.

製品分解図

PVC板

ABS樹脂カバー

高解像度ディスプレイ

ABS樹脂カバー

Image: Current limit settings for DCC30S and DCC50S models, adjustable via the monitor.

To adjust parameters:

1. Press the **Enter** button to access the parameter setting menu.

2. Use the **Up** and **Down** arrow buttons to navigate through the available parameters (e.g., charging voltage, charging current limit).

3. Press **Enter** again to select a parameter for adjustment.

4. Use the **Up** and **Down** arrow buttons to change the value.

5. Press **Enter** to confirm the new value.

6. Press the **Previous Page** button to exit the setting menu.

5.4 Operation Overview Video

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Video: An overview of the monitor's display and basic operation, including how to navigate through information screens.

6. SPECIFICATIONS

Image: Technical specifications and dimensions of the RMS-DCDC-JP monitor.

Parameter	Value
Electrical Specifications	5VDC
Supply Current	30mA
Self-Consumption	<1W
Operating Temperature Range	-20°C to 45°C
Voltage Accuracy	±0.1V
Current Accuracy	±0.1A

Parameter	Value
Dimensions (L x W x H)	70 x 110 x 31.5 mm (2.76 x 4.33 x 1.24 inches)
Weight	62g (0.14 lbs)
Output Voltage	12 Volts

7. COMPATIBILITY

The Renogy RMS-DCDC-JP monitor is compatible with the following Renogy DCC Charge Controllers:

- DCC Charge Controller 12V 30A MPPT (Model: RBC30D1S-JP)
- DCC Charge Controller 12V 50A MPPT (Model: RBC50D1S-JP)

8. TROUBLESHOOTING

If you encounter issues with your Renogy RMS-DCDC-JP monitor, please refer to the following common troubleshooting steps:

- **Monitor Not Powering On:**

  - Ensure the RJ45 communication cable is securely connected to both the monitor and the DCC charge controller.
  - Verify that the DCC charge controller is powered on and functioning correctly.

- **Incorrect Readings:**

  - Check all cable connections for looseness or damage.
  - Confirm that the monitor is compatible with your specific DCC charge controller model.
  - Refer to the main DCC charge controller manual for calibration procedures if available.

- **Displaying Error Codes:**

  - Note the specific error code displayed on the monitor.
  - Consult the DCC charge controller's instruction manual for a detailed explanation of error codes and their corresponding troubleshooting steps.

- **Buttons Unresponsive:**

  - Ensure the monitor is not in a locked mode (if applicable, refer to the main manual).
  - Gently press the buttons to ensure proper contact.

For persistent issues or advanced troubleshooting, please contact Renogy customer support.

9. MAINTENANCE

The Renogy RMS-DCDC-JP monitor requires minimal maintenance to ensure optimal performance and longevity.

- **Cleaning:** Regularly wipe the display screen and casing with a soft, dry cloth. Avoid using abrasive cleaners, solvents, or harsh chemicals, as these can damage the surface.
- **Connections:** Periodically check all cable connections to ensure they are secure and free from corrosion.
- **Environment:** Ensure the monitor is installed in a location that adheres to the specified operating temperature

range and is protected from direct moisture and extreme environmental conditions.

10. WARRANTY AND SUPPORT

The Renogy RMS-DCDC-JP monitor comes with a **1-year manufacturer's warranty**. This warranty covers defects in materials and workmanship under normal use.

For warranty claims, technical assistance, or any product-related inquiries, please contact Renogy customer support through their official website or the retailer where the product was purchased. Please have your product model number (RMS-DCDC-JP) and proof of purchase ready when contacting support.

10.1 Additional Support Videos

Your browser does not support the video tag.

Video: A general overview of Renogy products and their features, which may provide additional context for your system.

Your browser does not support the video tag.

Video: Another informational video from Renogy, potentially covering system integration or advanced tips.