

Renogy Pure Sine Wave Solar Inverter Charger

48V | 3500W

RIV4835PCS-1SS

VERSION A1



QUICK GUIDE

Before Getting Started

The quick guide provides important operation and maintenance instructions for RENOGY 48V 3500W Pure Sine Wave Solar Inverter Charger (hereinafter referred to as inverter charger).

Read the quick guide carefully before operation and save it for future reference. Failure to observe the instructions or precautions in the quick guide can result in electrical shock, serious injury, or death, or can damage the inverter charger, potentially rendering it inoperable.

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Online Manual









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Get to Know RENOGY Solar Inverter Charger





The wiring diagram only shows the key components in a typical DC-coupled residential energy storage system for the illustrative purpose. The wiring might be different depending on the system configuration. Additional safety devices, including disconnect switches, emergency stops, and rapid shutdown devices, might be required. Wire the system in accordance with the regulations at the installation site.

Step 1. Plan a Mounting Site

The inverter charger requires adequate clearance for installation, wiring and ventilation. The minimum clearance is provided below. Ventilation is highly recommended if it is mounted in an enclosure. Select a proper mounting site to ensure the inverter charger can be safely connected to the battery, solar panel(s), and grid/AC generator with the relevant cables.



igwedge The inverter charger should be installed on a vertical surface protected from direct sunlight.

Step 2. Mount the Inverter Charger



Mount the inverter charger to a wall via the self tapping screws (not provided).

Make sure the inverter charger is secured to the wall to prevent it from falling.

Step 3. Remove the Cover



First, ensure the On/Off/Remote Power Switch is in the OFF position.

Second, turn the two Cover Screws counterclockwise either by hand or by using a Phillips screwdriver, and remove the Cover.

Step 4. Ground the Inverter Charger

Recommended Accessories



Strip part of the insulation according to the grounding lug depth of the inverter charger.









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Step 9. Connect the Inverter Charger to an AC Generator (Optional)

The inverter charger can automatically enable or disable the connected AC generator if the generator supports auto power on/off.

- When the battery voltage is lower than the value set in Parameter 04, the generator is automatically powered on to supply the battery and loads.
- When the battery voltage is higher than the value set in Parameter 05, the generator is automatically powered off, and the loads are powered by the battery only.





For wiring details, see the user manual of the generator in use. 八

Step 10. Install the RS-485 Communication Cable (Optional)



Step 11. Install a Wired Remote Control

You can use a Wired Remote Control to power on or off the inverter charger remotely.





Step 13. Install the Cover



Power On/Off

Through On/Off/Remote Power Switch



Through Wired Remote Control

Push the On/Off/Remote Power Switch to REM. Press the RMS-P2 button to power on or off the inverter charger.



Remote Control over DC Home

Pair the inverter charger with the DC Home app. Monitor and modify the parameters of the inverter charger via the app.







lcon	Function	lcon	Function
	Indicates the inverter charger is connected to an AC source.		Indicates that the inverter charger is in inverter mode.
	Indicates that the inverter charger is in the wide voltage AC input mode (APL mode).	BYPASS	Indicates that the inverter charger is in the power bypass mode.
	Indicates that the inverter charger is connected to a solar panel.	OVERLOAD	Indicates that the inverter charger is overloaded.
	Indicates the battery level: 0 %~24% 25%~49% 50%~74% 75%~100	25%	Indicates load occupation level (how much power is consumed by loads): [] ^{100%} / _{25%} 0 %~24% [] ^{100%} / _{25%} 25%~49% [] ^{100%} / _{25%} 50%~74% [] ^{100%} / _{25%} 75%~100
Li	Indicates that the inverter charger is connected to a lithium battery.		Indicates that the buzzer is not enabled.
SLA	Indicates that the inverter charger is connected to a sealed lead acid battery.	ERROR	Indicates the inverter charger is in fault mode.
CHARGING	Indicates that the battery is being charged.	ECO	Indicates the inverter charger is operating under ECO power saving mode.
	Indicates the inverter charger is in AC/PV charging mode.	$\langle \! \rangle$	Indicates that the inverter charger is in setting mode.
I	Indicates the inverter charger is powering AC loads.		Displays error code when the inverter charger is not in setting mode. Displays parameter code when the inverter charger is in setting mode.
AC	Indicates AC input.	PV	Indicates solar input.
INV	Indicates the operating status of the inverter.		

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lcon	Function	lcon	Function
INPUTBATTTEMP	Shows battery voltage, total battery charge current, charge power, AC input voltage, AC input frequency, PV Input voltage, internal heatsink temperature, and software version.	OUTPUTBATTLOAD	Indicates output voltage, output current, output power, output visual power, battery discharge current, and software version. In the setting mode, the settings under the currently set parameter item code are displayed.

Checking Parameters

On the LCD, press the "**UP**" and "**DOWN**" buttons to turn the page to view the real-time performance data of the inverter charger.





Configure the Inverter Charger

Enter Parameter Setting Mode

Press the **SET** button to enter the parameter-setting mode during which the parameter code "00" flashes. You can press the **UP** and **DOWN** buttons to select the parameter that you want to configure.

