06 5-11	05 СИР	05 СИР	
	AC/INV CHARCE FAULT	Ac/INV CHARGE FAULT SET UP DD ENT	

lcon	Function	
5-0	Default. Solar panels and the grid charge the battery at the same time with the MPPT solar energy is as the first charge source. The grid becomes the first charge source when the solar energy is insufficient and stops charging the battery when the solar energy is sufficient.	
050	Solar energy is the only charge source even if the grid is available.	
CSo	The battery is first charged by the solar panels. The grid charges the battery only when solar energy is unavailable.	
CUb	The battery is first charged by the grid. The solar panels charge the battery only when the grid is unavailable.	

Battery Type (Parameter 08)







lcon	Function	
SLd	Default. Sealed lead-acid/AGM battery. Constant charging voltage: 58.4V; float charging voltage: 55.2V.	
FLd	Flooded lead-acid battery. Constant charging voltage: 58.4V; float charging voltage: 55.2V.	
6EL	Gel lead-acid battery. Constant charging voltage: 56.8V, float charging voltage: 55.2V.	
L 14	Lithium iron phosphate battery. Corresponding to 14 strings, 15 strings, and 16 strings.	
L 15	Default constant charging voltage:14 strings: 50.4V;	
L 16	 15 strings: 54V; 16 strings: 57.6V. 	
n 13	Lithium-ion battery. Corresponding to 13 strings and 14 strings.	
n 14	Default constant charging voltage: Default constant charging voltage: 13 strings: 53.2V; 14 strings: 57.2V.	
USE	User-defined battery type. All battery parameters can be set. For details, see the Renogy 48V 3500W Pure Sine Wave Solar Inverter Charger user manual from <u>https://www.renogy.com/</u> <u>support/downloads</u> .	

Damage caused by wrong battery type setting to the inverter charger is not covered by warranty.

N-G Bonding (Parameter 41)

The inverter charger is equipped with a Neutral to Ground bonding relay that ensures that either the neutral in or out contact of the RV is always grounded.

This helps prevent electrical shock caused by contact between the neutral contacts of the RV and external AC power sources.



d S	N-G Bonding disabled

Exit Parameter Setting Mode

41 5

Press the SET button to exit the parameter setting mode. Alternatively, select Parameter 00 and press the ENT button to exit the parameter setting mode.



For more information about the parameter code, visit renogy.com/support/downloads to check the user manual.

Overcurrent Protection



The inverter charger provides an input breaker that automatically pops up when the AC input current is higher than 40A. This helps cut off the AC input and prevent the inverter charger from being damaged.

Ensure the AC input current is no higher than 40A, and press the input breaker to enable AC input.

System Upgrade

You can use the USB Debugging Port to upgrade the inverter charger firmware. Store the firmware upgrade file to a USB drive, and plug the drive to the USB Debugging Port of the inverter charger. Enter Parameter 40 to complete the upgrade. For details, visit renogy.com/contact-us.



Troubleshooting

When the inverter charger is faulty, the FAULT indicator flashes with relative error code displayed on the LCD.



lcon	Description	lcon	Description
	Battery undervoltage alarm		Battery discharge current software protection
	Battery not detected		Battery undervoltage protection
	Battery overcurrent hardware protection		Charge overvoltage protection
	Bus overvoltage hardware protection		Bus overvoltage software protection
	Solar panel overvoltage protection		Buck overcurrent software protection
	Buck overcurrent hardware protection		The internal communication board is not communicating with the solar inverter charger.
	Side-by-side load protection		Inverter overload protection
	Inverted overcurrent hardware protection		Inverter short-circuit protection

lcon	Description	lcon	Description
	Overcurrent on AC input		Controller overtemperature protection
	Inverter overtemperature protection		Fan failure
	Memory failure		Model settings are wrong
	Bus short circuit fault		Error between AC output and bypass
	Internal battery boost circuit failure		Abnormal DC component in inverter voltage

For technical support, contact our custom service through renogy.com/contact-us.

Important Safety Instructions

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 inverter charger.
- Keep the inverter charger out of the reach of children.
- Do not dispose of the inverter charger 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.
- If the inverter charger is installed improperly on a boat, it may cause damage to components of the boat. Have the inverter charger by a qualified electrician.
- Do not expose the inverter charger to flammable or harsh chemicals or vapors.
- Clean the inverter charger regularly to ensure the cooling fans are not blocked.
- It is recommended that all cables should not exceed 10 meters because excessively long cables result in a voltage drop.
- The cable specifications listed in the quick guide account for critical, less than 3% voltage drop and may not account for all configurations.

Inverter Charger Safety

- There are no serviceable parts in the inverter charger. Do not open, dismantle, repair, tamper with, or modify the inverter charger.
- Confirm the polarities of the devices before connection. A reverse polarity contact can result in damage to the inverter charger and other connected devices, thus voiding the warranty.
- Ensure the inverter charger 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.
- The inverter charger generates heat when working. To prevent burns, touch the LCD only when the inverter charger is working.
- After the Inverter charger is powered off, the internal high voltage in the inverter charger will last for about 5 minute.
- Do not parallel the inverter charger with other AC input sources to avoid damage.

Battery Safety

- Risk of electrical shock! Ensure the connected battery is turned off before connecting it to the inverter charger.
- Do not touch the exposed electrolyte or powder if the battery is damaged.
- Risk of explosion! Never install the inverter charger in a sealed enclosure with flooded batteries! Do not install the inverter charger in a confined area where battery gases can accumulate.
- Prior to installing the inverter charger, ensure all battery groups are installed properly.
- The inverter charger should be as close to the battery as possible to avoid voltage drop due to long cables.
- Ensure the battery voltage is within the normal range of 40V to 60V. If the battery voltage is lower than 40V, the inverter charger fails to detect the battery. If the battery voltage is higher than 60V, the inverter charger is damaged.
- If the battery voltage is lower than 44V, the inverter charger cannot be powered on.

Solar Panel Safety			
 Do not use the solar panel(s) if there is any damage. 			
• Prior to connecting the inverter charger to the solar panel(s), shade the solar panel(s).			
Grid or AC Generator Safety			
 Risk of electrical shock! Ensure the grid or the AC generator is turned off before connecting them to the inverter charger. The inverter charger can only be connected to 120V single-phase power systems through the AC Input Port. Otherwise, the inverter charger will be damaged. 			
Renogy Support To discuss inaccuracies or omissions in this quick guide or user manual, visit or contact us at:			
G renogy.com/support/downloads			
To explore more possibilities of solar systems, visit Renogy Learning Center at:			
G renogy.com/learning-center			
For technical questions about your product in the U.S., contact the Renogy technical support team through:			
G renogy.com/contact-us			
For technical support outside the U.S., visit the local website below:			
Canada (I) ca.renogy.com China (I) www.renogy.cn			
United Kingdom (1) uk.renogy.com Australia (1) au.renogy.com			
South Korea (1) kr.renogy.com Japan (1) renogy.jp			
Germany (Implication between b			

FCC Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

(1) Reorient or relocate the receiving antenna.

- (2) Increase the separation between the equipment and receiver.
- (3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- (4) Consult the dealer or an experienced radio / TV technician for help.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body.



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





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