RENOGY

PHOENIX 200
POWER STATION

Model: R200PHX

▶▶ User Guide

TABLE OF CONTENTS

IMPORTANT SAFETY INSTRUCTIONS

Please read the User Guide carefully before recharging or operating your Phoenix 200.

IMPORTANT SYMBOLS

WARNING	Indicates potentially dangerous conditions that could result in personal injury
CAUTION	Indicates conditions or practices that could result in damages to the unit or other equipment
NOTE	Indicates procedures or functions that are important for proper and safe operation of the unit and/or other equipment

WARNING DO NOT submerge the unit in water or operate the unit in the rain. Doing so may cause short-circuits, electric shocks, and/or fire.

WARNING DO NOT place the unit near fire and/or heat the unit. Doing so may cause irreversible damages to the unit and/or battery explosion.

WARNING DO NOT overload the AC or DC outputs. Please check the specifications of output ports and devices before operation.

WARNING Please dispose of the product according to the local recycling and environmental regulations.

WARNING Please turn off the output ports when no devices are connected to the unit to prevent electric shocks.

CAUTION DO NOT dismantle or modify the unit. Doing so may cause irreversible damages to the unit and void warranty.

CAUTION DO NOT drop or strike the unit. Doing so may cause circuit failures and cracks in the casing.

CAUTION Keep the unit out of the reach of young children.

CAUTION DO NOT place the unit under direct sunlight or place in high-temperature situations. Doing so may cause unit malfunction or component degradation.

CAUTION DO NOT expose the unit to strong electrostatic fields, strong magnetic fields, and/or radiation.

CAUTION Please check the unit before each use. Stop using the unit if you notice unusual smells, heating, distortion, or any other abnormalities.

FEATURES

UNIVERSAL COMPATIBILITY

Equipped with multiple output ports to power mainstream essential gadgets and small appliances at the push of a button.

EASY RECHARGING

Conveniently charge the PHOENIX 200 through a wall outlet, a car socket, or with a solar panel.

COMPREHENSIVE PROTECTION

The battery management system (BMS) enables voltage control, temperature control, short circuit protection, overcurrent protection, and more advanced safety operations.

POWERFUL FLASHLIGHT

Be prepared for blackouts or other emergencies with the multi-mode LED flashlights on both sides of the carrying handle.

PACKAGE CONTENTS

- 1 x Renogy PHOENIX 200 Power Station

- 1 x Cigarette Lighter Plug to 5.5mm DC Adapter Cable

- 1 x AC/DC Adapter

- 1 x User Guide

① ③ ④ ②

100%
75%
50%
25%

AC
DC/CIG
TYPE-C
USB

USB

⑥
⑦ DC OUT TYPE-C

⑤

⑧ AC LIGHT ⑨
USB
TYPE-C
DC
CIG
⑩

⑫

DC IN

⑪

⑭ ⑬

⑮
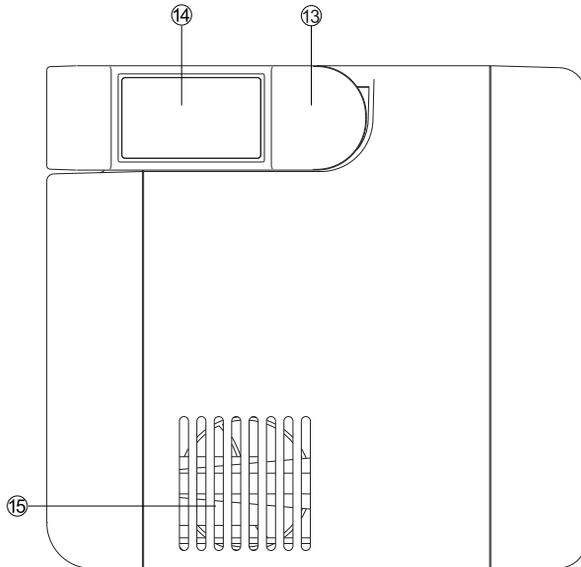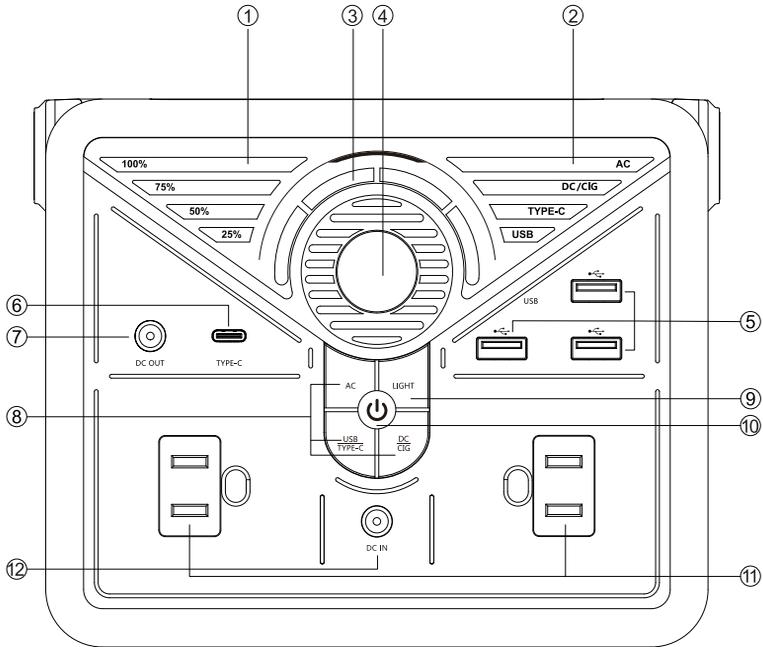
①	Battery Level LED Indicators	⑨	Flashlight On/Off Button
②	Port Status LED Indicators	⑩	Main Power Button
③	Flashlight Status LED Indicators	⑪	AC Outlets
④	CIG Port	⑫	DC Input Port
⑤	USB-A Ports	⑬	Folding Carrying Handle
⑥	USB-C Port	⑭	LED Flashlight
⑦	DC Output Port	⑮	Air Vent
⑧	Port On/Off Buttons		

SPECIFICATIONS

General	
Dimension	181 x 155 x 143 mm / 7.1 x 6.1 x 5.6 in.
Weight	2.1 kg / 4.6 lb.
Material	PC + ABS
Flashlight	2 x 1.6W LED
Normal Operating Temperature	-10-45 ℃ / 14-113 ℉
Storage Temperature	-20-60 ℃ / -4-140 ℉
Operating Humidity	0-65%
Storage Humidity	10-90%
Certifications	FCC, CE, PSE, RoSH
Battery	
Type	Lithium-ion Battery
Voltage	10.8V
Capacity	17500mAh / 189Wh
Cycle Life	500 Cycles to 80% Capacity
Input	
DC Input Port	12-25V, 30W Max
Output	
USB-A Port (3)	5V / 2.4A Each Max
USB-C Port	5V / 3A Max

CIG Port	9.6-12.6V / 10A Max
DC Output Port	9.6-12.6V / 5A Max
AC Outlet (2)	110V / 60Hz (US, JP, CA) 220V / 50Hz (AU, EU, CN) 150W Rated, 200W Surge Modified Sine Wave
Total Continuous Output	200W Max

BATTERY LEVEL LED INDICATORS

- Four Battery Level LED Indicators indicate the battery level of the PHOENIX 200, approximating 25% - 50% - 75% - 100% capacity.

- As you use your PHOENIX 200 to power other devices, the Battery Level LED Indicators will go out one by one to indicate the remaining battery capacity.

- When the battery level of PHOENIX 200 is lower than 20%, the last Battery Level LED Indicator will flash twice per second.

- When recharging your PHOENIX 200, one of the Battery Level LED Indicators will flash. The flashing LED indicates the unit's current battery level. Once your PHOENIX 200 is fully recharged, all Battery Level LED Indicators will be lit and remain solid.

CAUTION If the Battery Level LED Indicators flash in an unusual way, your PHOENIX 200 may need special attention. Please refer to the TROUBLESHOOTING section for help.

RECHARGING YOUR PHOENIX 200

CAUTION To maximize battery life, be sure to fully recharge your PHOENIX 200 before operating or storing.

NOTE To shorten the recharge time of PHOENIX 200, it is recommended to disconnect all loads while recharging the unit.

Recharge Time

- **Recharge via Solar:** 7 Hours
- **Recharge via AC/DC Adapter:** 7 Hours
- **Recharge via Car Socket:** 8 Hours

The above recharge times are based on conditions when the PHOENIX 200 is recharged at full speed with no loads connected to it.

Recharging via Solar

- For optimal recharging performance, it is strongly recommended to recharge your PHOENIX 200 using a solar panel with 30W or higher rated power (not included) on bright sunny days free of scattered clouds.

- Place the solar panel under direct sunlight. Steer clear of trees or branches that can shade the solar panel and slow down the recharging process.

- Use a solar panel connectors to 5.5mm DC adapter cable (not included) to connect the solar panel to the DC Input Port of your PHOENIX 200 and place your PHOENIX 200 in the shade to prevent it from overheating.

- The PHOENIX 200 will begin to recharge automatically and one of the Battery Level LED Indicators will flash. The flashing LED indicates the unit's current battery level.
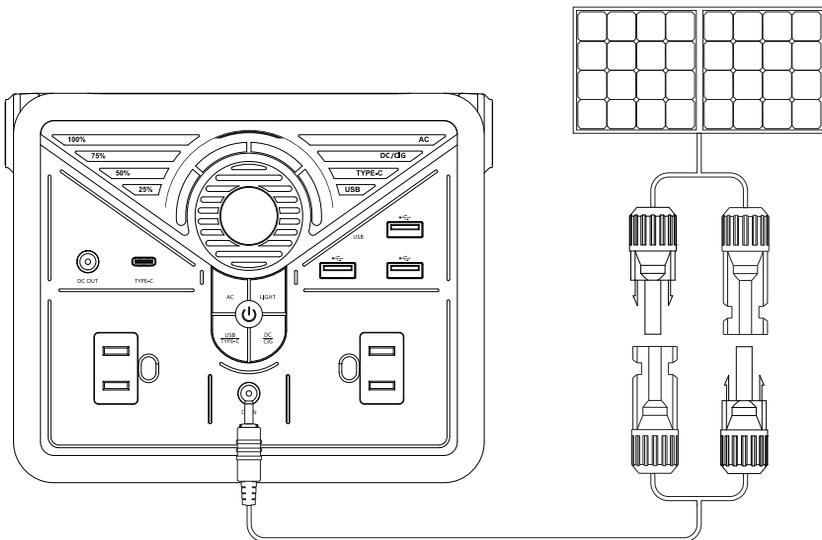
Recommended Solar Panels:

- **Renogy Monocrystalline Solar Panel:** 50W

- **Renogy Polycrystalline Solar Panel:** 50W

- **Renogy Flexible Solar Panel:** 50W

- **Renogy E.FLEX Series Portable Solar Panel:** 50W

WARNING Electrical shock can occur if the solar panel connectors to 5.5mm DC adapter cable is damaged or frayed. DO NOT use a damaged or frayed cable to recharge your PHOENIX 200.

CAUTION Make sure the open circuit voltage of the solar panel does not exceed 25V or fall short of 12V.

NOTE The solar recharge time is highly dependent on solar irradiance and ambient temperature.

Recharging via AC/DC Adapter

- Plug your PHOENIX 200 into a wall outlet through the DC Input Port using the included AC/DC Adapter.

- The PHOENIX 200 will begin to recharge automatically and one of the Battery Level LED Indicators will flash. The flashing LED indicates the unit's current battery level.
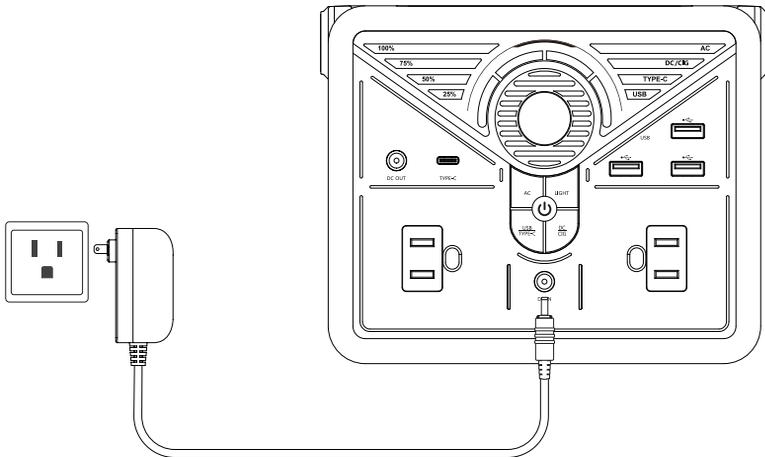
WARNING Electrical shock can occur if the AC/DC Adapter is damaged. DO NOT use a damaged AC/DC Adapter to recharge your PHOENIX 200.

Recharging via Car Socket

- Plug your PHOENIX 200 into a car socket through the DC Input Port using the included Cigarette Lighter Plug to 5.5mm DC Adapter Cable.

- The PHOENIX 200 will begin to recharge automatically and one of the Battery Level LED Indicators will flash. The flashing LED indicates the unit's current battery level.
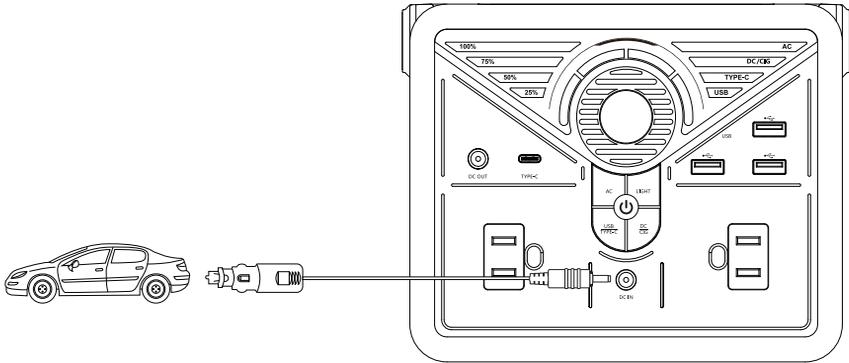
WARNING Electrical shock can occur if the Cigaretter Lighter Plug to 5.5mm DC Adapter Cable is damaged or frayed. DO NOT use a damaged or frayed cable to recharge your PHOENIX 200.

CAUTION Please disconnect your PHOENIX 200 from the car socket when starting the engine. Electric surges from the alternator when starting may damage your PHOENIX 200.

NOTE For some makes or models of vehicles, the car socket may not operate when the ignition is turned off. In such cases, please start the engine before recharging your PHOENIX 200 via the car socket

OPERATING YOUR PHOENIX 200

CAUTION Operating your PHOENIX 200 at high temperatures above 113℉ (45℃) or at low temperatures below 32℉ (0℃) can result in battery performance degradation and service life shortening. For optimal battery performance and maximum battery life, it is strongly recommended to operate your PHOENIX 200 at room temperature.

Operation Time

- **Battery Powered Devices:**

$$\text{Number of Full Charges} = \frac{37,800\text{mAh x } 0.95}{\text{The Battery Capacity of Device (mAh)}}$$

- **DC Powered Devices:**

$$\text{Working Hours} = \frac{189\text{Wh x } 0.95}{\text{The Rated Power of Device (W)}}$$

- **AC Powered Devices:**

$$\text{Working Hours} = \frac{189\text{Wh x } 0.85}{\text{The Rated Power of Device (W)}}$$

NOTE The above estimation formulas only apply when the PHOENIX 200 has been fully recharged and the device does not draw too much power.

Actual number of full charges and working hours may vary from different powering methods and device operation status.

Powering Your Devices

- Four Port Status LED Indicators respectively display the status of the AC Outlets, DC Output Port and CIG Port, USB-C Port, as well as USB-A Ports.

- To use the output port(s), first press the Main Power Button to turn on the PHOENIX 200. The Battery Level LED Indicator(s) will illuminate to indicate the unit's current battery level. Then, press the corresponding Port On/Off Button(s) to turn on the output port(s). The corresponding Port Status LED Indicator(s) will illuminate. Lastly, connect your device(s) to the output port(s) for power. When not using the output port(s), long press the corresponding Port On/Off Button(s) to turn it (them) off and the corresponding Port Status LED Indicator(s) will go out.

- When no device is connected to the PHOENIX 200, long press the Main Power Button to turn it off to conserve energy.

- When the battery level of PHOENIX 200 is lower than 10%, use of the AC Outlets will be automatically disabled. Please use DC outputs to continue powering your devices.

- When the battery voltage is excessive low, all the outputs will be cut off automatically. See TROUBLESHOOTING for more details.

Compatible Devices:

- **USB-A Ports:** Smart Watch, Electronic Book, Smart Phone, Tablet, Action Camera, Digital Camera, Bluetooth Speaker, Wireless Headphone, Drone, and other USB enabled devices.

- **USB-C Port:** Smart Phone, Tablet, Handheld Gaming Console, DSLR Camera, and other USB-C enabled devices.

- **CIG Port:** Portable Refrigerator, Car Vacuum, Car Air Fan, CPAP Machine and other car powered devices.

- **DC Output Port:** LED Strip Light, Modem, Router, Motor, and other 12V DC powered devices.

- **AC Outlets:** Laptop, Monitor, TV, Game Console, Inkjet Printer, Blue-ray Player, Light Bulb and other AC powered devices.

WARNING The PHOENIX 200 can provide up to 200W total continuous output. Allocate the outputs rationally and follow the specifications of each output port. DO NOT overload your PHOENIX 200. If the total output power should exceed 200W, the AC Outlets will be shut off first, followed by the DC Output Port and CIG Port. See TROUBLESHOOTING for more details.

CAUTION All the output ports except USB-A Ports will be shut off if the PHOENIX 200 operates below 14 ℉ (-10℃). When this is the case, warm up the unit to avoid battery performance degradation and service life shortening. See TROUBLESHOOTING for more details.

CAUTION Battery high-temperature protection may be triggered when the PHOENIX 200 is operating at full load. When this is the case, cool down the unit before resuming operation. See TROUBLE-SHOOTING for more details.

CAUTION When using the AC outlets of your PHOENIX 200, keep 4 inches of space on either side of the unit to guarantee efficient heat dissipation of the inverter.

CAUTION If any of the Ports Status LED Indicators flashes in an unusual way, your PHOENIX 200 may need special attention. See TROUBLESHOOTING for help.

NOTE Some devices that require high current impulse may not be compatible with the PHOENIX 200 even though they do not exceed the power ratings of output ports.

NOTE When the PHOENIX 200 is powering devices that have high power consumption, the battery level can drop quickly. In this case, you may not get exactly 189Wh of energy.

NOTE The PHOENIX 200 can be recharged and deliver DC power to your devices simultaneously. However, AC power is not available when the PHOENIX 200 is being recharged.

Using the LED Flashlight

- The LED Flashlights on both sides of the Folding Carrying Handle have four light modes: Bright (100% brightness), Dim (50% brightness), Flashing, and SOS.

- Press the Flashlight On/Off Button to turn on the LED Flashlights, switch light modes, and turn off the LED Flashlights. You can also long press the Flashlight On/Off Button to turn off the LED Flashlights no matter what mode are they in.

MAINTENANCE

- To prolong the service life of your PHOENIX 200, keep it away from harsh sunlight, water, dust, and dirt. DO NOT leave your PHOENIX 200 outside under harsh environments.

- If possible, keep your PHOENIX 200 connected to a power source when it is not being used and avoid using large loads when the battery level is low.

- To maintain a healthy battery, please recharge your PHOENIX 200 at least once every two months.

- If you do not intend to use your PHOENIX 200 frequently, it is strongly recommended to keep its battery level at around 50% and store it in a clean, dry and well-ventilated environment with temperatures around 77℉ (25℃) and a humidity no higher than 75%.

- Keep your PHOENIX 200 away from corrosives, fire, and heat sources.

- If your PHOENIX 200 does not operate normally, please refer to the following table for a possible cause and solution.

- If the following troubleshooting solutions do not work, please contact us for help. Refer to the last page of User Guide for contact information.

LED Indicators	Possible Causes	Solution
All Battery Level LED Indicators flash twice per second	1. DC Input Port Overvoltage Protection (Input Voltage≥27.5V) 2. DC Input Port Undervoltage Protection (Input Voltage≤10V)	1. Remove all connections 2. If the voltage rating of power source does not fall in the range of 12-25V, stop using that power source to recharge the unit. 3. Connect the unit to the power source that conforms to the specifications of DC Input Port and the unit will resume recharging automatically.
All Battery Level LED Indicators and Port Status LED Indicators flash twice per second	1. Discharge High Temperature Protection (Battery Temperature ≥149℉/65℃) 2. Discharge Low Temperature Protection (Battery Temperature ≤-4℉/-20℃) 3. Recharge High Temperature Protection (Battery Temperature ≥122℉/50℃) 4. Recharge Low Temperature Protection (Battery Temperature ≤32℉/0℃)	1. Remove all connections. 2. Cool down or warm up the unit to the room temperature. 3. If the unit was powering loads, press the Port On/Off Button(s) to turn on the output port(s) again and reconnect the loads to the unit. 4. If the unit was recharging, reconnect the unit to the power source and the unit will resume recharging automatically.
The last Battery Level LED Indicator flashes twice per second and the unit get shut off afterwards	1. Battery Low Voltage Protection (Battery Voltage≤9V)	1. Remove all output connections. 2. Press the Main Power Button to restart the unit and press the Ports On/Off Buttons.

		3. If output ports can be turned on, it means that the loads drew too much power from the unit and pulled down the battery voltage. In this case, only connect small loads to the unit. 4. If none of the output ports can be turned on, it means that the unit should not continue powering loads. In this case, recharge the unit as soon as possible to avoid permanent damages to the battery.
All Battery Level LED Indicators and the Port Status LED Indicator of USB-A Ports flash twice per second	1. USB-A Ports Overcurrent Protection (Output Current≥ 2.6A) 2. USB-A Ports Short-circuit Protection	1. Remove connections to the USB-A Ports 2. If the USB-A Ports were shorted, remove the short circuit immediately. 3. If the loads drew currents that exceed the specifications of USB-A Ports, stop powering those loads via the USB-A Ports. 4. Press the Port On/Off Button to turn on the USB-A Ports again and connect only the loads that conform to the specifications of USB-A Ports to the unit.
All Battery Level LED Indicators and the Port Status LED Indicator of DC Output Port and CIG Port flash twice per second	1. DC Output Port Overcurrent Protection (Output Current≥ 6.5A) 2. CIG Port Overcurrent Protection (Output Current≥ 12.1A) 3. DC Output Port Short-circuit Protection	1. Remove connections to the DC Output Port and CIG Port. 2. If the DC Output Port or CIG Port was shorted, remove the short circuit immediately. 3. If the loads drew currents that exceed the specifications of DC Output Port or CIG Port, stop

	4. CIG Port Short-circuit Protection 5. DC Output Port Reverse Current Protection	powering those loads via the DC Output Port or CIG Port. 4. If the power source was connected to the DC Output Port, disconnect the power source and recharge the unit via the DC Input Port instead. 5. Press the Port On/Off Button to turn on the DC Output Port and CIG Port again and connect only the loads that conform to the specifications of DC Output Port and CIG Port to the unit.
All Battery Level LED Indicators and the Port Status LED Indicator of USB-C Port flash twice per second	1. USB-C Port Overcurrent Protection (Output Current≥ 3.3A) 2. USB-C Port Short-circuit Protection	1. Remove the connection to the USB-C Port 2. If the USB-C Port Port was shorted, remove the short circuit immediately. 3. If the load drew a current that exceeds the specifications of USB-C Port, stop powering that load via the USB-C Port. 4. Press the Port On/Off Button to turn on the USB-C Port again and connect only the load that conforms to the specifications of USB-C Port to the unit.
All Battery Level LED Indicators and the Port Status LED Indicator of AC Outlets flash twice per second	1. AC Outlets Overload Protection (Output Power≥200W) 2. AC Outlets Short-circuit Protection 3. Inverter Over Temperature Protection (Inverter Temperature≥203℉/95℃	1. Remove all output connections. 2. If the AC Outlets were shorted, remove the short circuit immediately. 3. If the loads drew power that exceeds the specifications of AC Outlets, stop powering those loads via the AC Outlets.

		4. If the unit has been operating at high loads or at high temperatures for a long time, cool down the unit to room temperature.
		5. Press the Port On/Off Button to turn on the AC Outlets again and connect only the loads that conforms to the specifications of AC Outlets to the unit.
All Battery Level LED Indicators and the Port Status LED Indicators of all operating output ports flash twice per second	1. Total Output Overload Protection (Output Power≥ 200W)	1. Reallocate the outputs to keep the total output power under 200W.
		2. Press the Port On/Off Button(s) to turn on the output port(s) again and connect only necessary loads to the unit.

FREQUENTLY ASKED QUESTIONS

1. Why doesn't my PHOENIX 200 power other devices?

First, make sure the unit has been turned on by pressing the Main Power Button. Then check the battery level of unit. If the last Battery Level LED Indicator is flashing, please recharge the unit as soon as possible. If not, make sure the output ports have been turned on by pressing the corresponding Ports On/Off Buttons. Finally, check if the connected device conforms to the specifications of output ports. If the unit still can't power your devices, see TROUBLESHOOTING or contact us for help. Refer to the last page of User Guide for contact information.

2. Can I replace the battery pack in my PHOENIX 200?

No, the battery pack in PHOENIX 200 is not replaceable. Do not try to dismantle your PHOENIX 200 and replace the battery by yourself. Doing so may cause irreversible damages to the unit and battery explosion.

3. Is the PHOENIX 200 chainable?

No, the PHOENIX 200 cannot be chained with other power stations. If you are looking for a rechargeable AC power supply with larger capacity, please visit our official website or contact us for more options. Refer to the last page of User Guide for contact information.

4. Is the PHOENIX 200 waterproof?

No, the PHOENIX 200 is not waterproof. Please keep the unit away from moisture. Do no submerge the unit in water or operate the unit in the rain. Doing so may cause short-circuits, electric shocks, and fire.

5. Why doesn't the battery of PHOENIX 200 last as long as I expect?

The battery capacity is rated at 0.2C. When the PHOENIX 200 is powering devices that have high power consumption, the internal resistance of battery will turn more energy into heat and lower battery capacity as a result. When this is the case, you may not get exactly 189Wh of energy.

WARRANTY

- RENOGY products are covered by a 12-month limited warranty from the original purchase date. If any problems occur, please contact us for assistance. Refer to the last page of User Guide for contact information.

- We only provide after-sales services for products that are sold by RENOGY or retailers and distributors authorized by RENOGY. If you have purchased your unit from other channels, please contact your seller for more information about return and warranty.

- Please register your purchase(s) directly at warranty.renogy.com/support/tickets/new or your region's corresponding website so that we can stay in touch and contact you in the unlikely event that a safety recall is required.

驭光者 · 火鸟200
太阳能便携式电源箱

型号: R200PHX

▶▶ 用户指南

目录

安全操作准则

请在为本机充电或使用本机前仔细阅读用户指南。

重要标识

警告	表示可能造成人员受伤的潜在危险状况
注意	表示可能造成本机或用电设备损坏的状况或行为
提示	表示对本机或用电设备的安全合理使用非常重要的步骤或功能

警告　请勿将本机浸入水中或在雨中使用本机，以免引发短路，触电或者火灾。

警告　请勿将本机放在靠近明火或其他热源的地方，以免对本机造成不可逆的损伤或导致电池爆炸。

警告　请勿超出本机的交流输出或直流输出限制。请在使用前确认本机的输出接口和用电设备的规格。

警告　请按照当地的回收和环保规范处理本机。

警告　请在没有用电设备连接的时候关闭输出接口以防触电。

注意　请勿拆解或改装本机。这样做可能对本机造成不可逆的损伤，并且违反我司保修条例。

注意　请勿跌落或敲击本机，以免造成电路故障或外壳破损。

注意　请将本机放置在儿童接触不到的地方。

注意　请勿将本机放置在阳光直射的地方或高温环境下，以免造成设备故障或元件性能衰退。

注意　请勿将本机暴露在强静电场，强磁场或辐射的环境中。

注意　请在每次使用前对本机进行检查。如果发现异常气味，发热，变形或其他异常，请立刻停止使用本机。

产品特性

广泛的兼容性

火鸟200配备了多种输出接口，只需按下按键即可为主流的电子设备和小型家电供电。

多样的充电方式

火鸟200可以方便地通过交流插座，点烟器或太阳能板充电。

周全的保护

火鸟200的电池管理系统（BMS）能进行电压调节，温度调节，短路保护，过流保护和其它更先进的安全保护措施。

强光照明灯

火鸟200提手两侧的多功能LED照明灯随时为停电或其它紧急情况做好准备。

产品配件

- 1 x Renogy驭光者·火鸟200太阳能便携式电源箱

- 1 x 点烟器插头转5.5mm DC充电线

- 1 x AC/DC适配器

- 1 x 用户指南
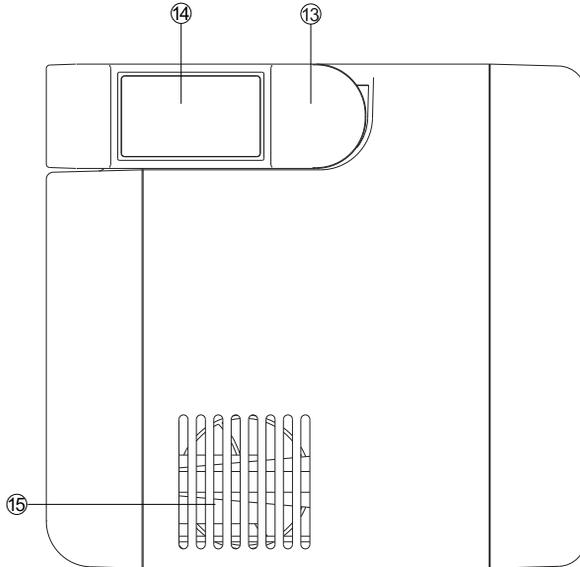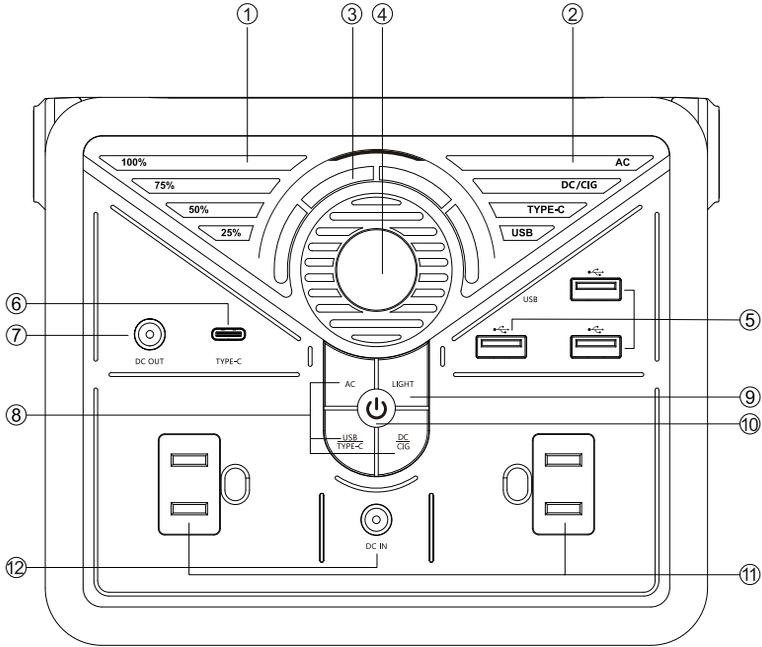
100%
75%
50%
25%

AC
DC/CIG
TYPE-C
USB

USB

DC OUT   TYPE-C

AC   LIGHT

USB
TYPE-C   DC
CIG

DC IN

① 电量LED指示灯	⑨ 照明灯开关
② 接口状态LED指示灯	⑩ 总电源开关
③ 照明灯状态LED指示灯	⑪ AC插座
④ CIG接口	⑫ DC输入接口
⑤ USB-A接口	⑬ 折叠式提手
⑥ USB-C接口	⑭ LED照明灯
⑦ DC输出接口	⑮ 通风口
⑧ 接口开关	

规格参数

概况	
尺寸	181 x 155 x 143 毫米 / 7.1 x 6.1 x 5.6 英寸
重量	2.1 千克 / 4.6 磅
材料	PC + ABS
照明灯	2 x 1.6W LED
正常工作温度	-10-45 ℃ / 14-113 ℉
储存温度	-20-60 ℃ / -4-140 ℉
工作湿度	0-65%
储存湿度	10-90%
认证	FCC, CE, PSE, RoSH
电池	
类型	锂离子电池
电压	10.8V
容量	17500mAh / 189Wh
循环寿命	500次循环后衰减到80%容量
输入	
DC输入接口	12-25V，30W（峰值）
输出	
USB-A接口（3）	5V / 2.4A（单口峰值）
USB-C接口	5V / 3A（峰值）

CIG接口	9.6−12.6V / 10A（峰值）
DC输出接口	9.6−12.6V / 5A（峰值）
AC插座（2）	110V / 60Hz (US, JP, CA) 220V / 50Hz (AU, EU, CN) 150W（额定），200W（瞬时峰值） 修正弦波
总持续输出	200W（峰值）

电量LED指示灯

• 四个电量LED指示灯用于指示火鸟200的电量，它们分别对应 25%，50%，75%和100%电量。

• 当您使用火鸟200为其他设备供电时，电量LED指示灯将逐一熄灭以指示剩余电量。

• 当火鸟200的电量低于20%时，最后一颗电量LED指示灯将以2Hz的频率闪烁。

• 当您在为您的火鸟200充电时，其中一颗电量LED指示灯将以闪烁的方式指示当前电量。当您的火鸟200电量完全充满时，所有电量LED指示灯将保持常亮状态。

注意　如果电量LED指示灯异常闪烁，表示您的火鸟200需要特别注意。请参阅故障排除章节以获取帮助。

为您的火鸟200充电

注意　为延长火鸟200的电池寿命，请务必在使用或储存前将其电量完全充满。

注意　为缩短火鸟200的充电时间，我们建议您在充电时断开所有负载。

充电时间

• **通过太阳能充电：** 7小时
• **通过AC/DC适配器充电：** 7小时
• **通过点烟器充电：** 8小时

注意　上述充电时间基于PHOENIX 200全速充电且没有负载接入的情况。

通过太阳能充电

- 为获得最佳充电效果，我们强烈建议您在晴朗无云的天气下，额定功率30W及以上的太阳能组件（单独购买）为火鸟200充电。

- 将太阳能组件放置在阳光直射的地方，避免其被树木或树枝遮挡而减缓充电速度。

- 使用光伏连接器转5.5mm DC充电线（单独购买）将太阳能组件连接至火鸟200的DC输入接口，将您的火鸟200至于阴凉处以防其过热。

- 火鸟200将自动开始充电，电量LED指示灯也将逐一点亮。
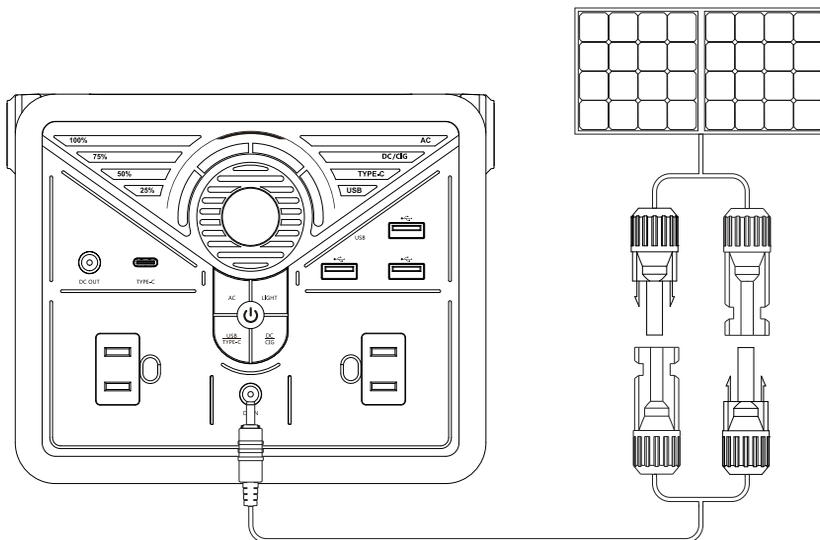
推荐的太阳能组件:

- **Renogy 单晶太阳能组件：** 50W

- **Renogy 多晶太阳能组件：** 50W

- **Renogy 柔性太阳能组件：** 50W

- **Renogy E.FLEX系列便携式太阳能充电板：** 50W

| 警告 | 如果光伏连接器5.5mm　DC充电线损坏或磨损，可能会引起触电。请勿使用损坏或磨损的线材为您的火鸟200充电。 |

| 注意 | 请确保太阳能组件的开路电压不高于25V且不低于12V。 |

| 提示 | 火鸟200通过太阳能充电所需的时间取决于光照强度和环境温度。 |

通过AC/DC适配器充电

• 使用附带的AC/DC适配器将火鸟200的DC输入接口连接至插座。

• 火鸟200将自动开始充电，电量LED指示灯也将逐一点亮。
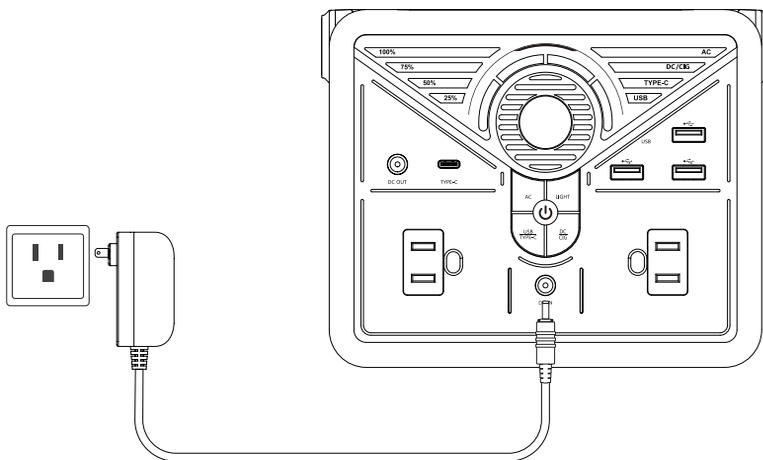
| 警告 | 如果AC/DC适配器损坏，可能会引发触电。请勿使用损坏的AC/DC适配器为您的火鸟200充电。 |

通过点烟器充电

• 使用附带的点烟器插头转5.5mm DC充电线将火鸟200的DC输入接口连接至点烟器。

• 火鸟200将自动开始充电，电量LED指示灯也将逐一点亮。
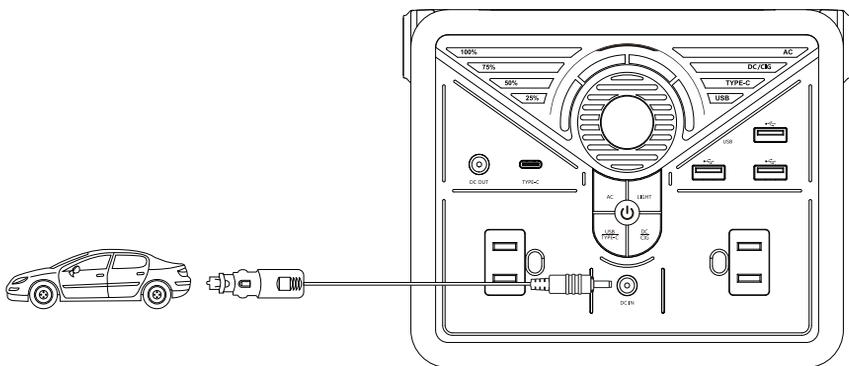
警告 如果点烟器插头转5.5mm DC充电线损坏或磨损，可能会引发触电。请勿使用损坏或磨损的线材为您的火鸟200充电。

注意 请在启动引擎时断开火鸟200与点烟器的连接。引擎启动时，发电机的电涌可能会损坏您的火鸟200。

提示 对于某些品牌或型号的车辆，点烟器在熄火后可能会被关闭。如果遇到该情况，请在通过点烟器为您的火鸟200充电前先启动引擎。

使用您的火鸟300

注意 在高于113℉（45℃）的高温下，或在低于14℉（−10℃）的低温下使用您的火鸟200会导致电池性能下降和使用寿命缩短。为获得最佳电池性能和最长电池寿命，我们强烈建议您在室温下使用您的火鸟200。

运行时间

- **电池供电的设备：**

$$充电次数= \frac{37{,}800\text{mAh} \times 0.95}{设备的电池容量（mAh）}$$

- **直流电供电的设备：**

$$工作时间= \frac{189\text{Wh} \times 0.95}{设备的额定功率（W）}$$

- **交流电供电的设备：**

$$工作时间= \frac{189\text{Wh} \times 0.85}{设备的额定功率（W）}$$

| 提示 | 上述估算公式仅适用于火鸟200完全充满且输出功率不太大的情况。 |

| 提示 | 实际的充电次数和工作时间可能因不同的供电方式和设备运行状况而异。 |

为您的设备供电

- 四个接口状态LED指示灯分别指示AC插座，DC输出接口和CIG接口，USB-C接口以及 USB-A接口的状态。

- 当需要使用输出接口时，首先按下总电源开关打开火鸟200，电量LED指示灯将会点亮以指示当前电量。然后，按下相应的接口开关打开接口，相应的接口状态LED指示灯将会点亮。最后，将您的设备连接至接口进行供电。当不需要使用接口时，长按相应的接口开关关闭接口，相应的接口状态LED指示灯也将熄灭。

- 当没有设备接入火鸟200时，请长按总电源开关将其关闭以节省电量。

- 当火鸟200的电量低于10%时，AC插座将被禁用。请使用直流输出继续为您的设备供电。

- 当电池电压过低时，所有输出都将被自动切断。请参阅故障排除章节以获得更多详细信息。

适配的设备：

- **USB-A接口：** 智能手表，电子书，智能手机，平板电脑，运动相机，数码相机，蓝牙音箱，无线耳机，无人机和其它支持USB的设备。

- **USB-C接口:** 智能手机，笔记本电脑，任天堂Switch，数码单反相机和其它支持USB-C的设备。

- **CIG接口:** 便携冰箱，车载吸尘器，车载风扇，睡眠呼吸机和其它车载设备。

- **DC输出接口：** LED灯带，调制解调器，路由器，直流电机和其它 12V直流电供电的设备。

- **AC 插座:** 笔记本电脑，显示器，电视，游戏主机，喷墨打印机，蓝光播放器，电灯和其它交流电供电的设备。

| 警告 | 火鸟200总共能够提供高达200W的持续输出。请合理分配输出并遵循各个输出接口的规格，请勿过载使用火鸟200。如果总输出功率超过200W，AC插座将被优先关断，随后DC输出接口和CIG接口也将被陆续关断。请参阅故障排除章节以获得更多详细信息。 |

注意	当火鸟200在温度低于14℉（-10℃）的环境下使用时，除USB-A接口外的所有输出接口都将被关断。如果遇到该情况，请将本机回暖至室温，以防电池性能下降和使用寿命缩短。请参阅故障排除章节以获得更多详细信息。
注意	当火鸟200满载输出时，可能会触发电池高温保护。如果遇到该情况，请待本机冷却至室温后再继续使用。请参阅故障排除章节以获得更多详细信息。
注意	当使用火鸟200的AC插座时，请保证本机的两侧留有至少4英寸（10厘米）的空间，以确保逆变器的有效散热。
注意	如果接口状态LED指示灯异常闪烁，表示您的火鸟200需要特别注意。请参阅故障排除章节以获取帮助。
提示	火鸟200可能无法适配某些需要瞬间大电流的设备，即使它们的额定功率没有超出输出接口的功率限制。
提示	当火鸟200为大功耗设备供电时，电量可能会迅速减少。在这种情况下，您可能无法获得189Wh的电能。
提示	火鸟200可以在充电的同时为您的设备提供直流输出，但是交流输出将会被禁用。

使用LED照明灯

- 折叠式提手两侧的LED照明灯有4种照明模式：高亮（100%亮度），低亮（50%亮度），频闪和SOS。

- 按下照明灯开关打开LED照明灯，切换照明模式和关闭LED照明灯。无论LED照明灯处在何种照明模式下，您都可以长按照明灯开关直接将其关闭。

维护

- 为延长火鸟200的使用寿命，请使其远离强烈的阳光，水，灰尘和污垢。请勿将其放置于恶劣的室外环境下。

- 如有可能，请在不使用火鸟200的时候将其连接到电源进行充电。避免在低电量的时候使用火鸟200为大负载供电。

- 为了保证电池的健康，请至少每两个月为火鸟200充一次电。

- 如果您不经常使用您的火鸟200，我们强烈建议您将其电量保持在50%左右，并储存在干净，干燥，通风的环境下，储存温度以77℉（25℃）为宜，储存湿度不得高于75%。

- 请使您的火鸟200远离腐蚀剂，火源和热源。

- 如果火鸟200无法正常使用，请参阅下表了解可能的原因。

- 如果下列故常排除解决方案不起作用，请与我们联系以获取帮助。联系方式请参阅用户指南的最后一页。

LED指示灯	可能原因	解决方案
所有电量LED指示灯以2Hz的频率闪烁	1. DC输入接口过压保护（输入电压≥27.5V） 2. DC输入接口欠压保护（输入电压≤10V）	1. 断开所有连接。 2. 如果电源的额定电压不在12-25V范围内，请停止使用该电源为本机充电。 3. 将本机连接至符合DC输入接口规格的电源，本机将自动继续充电。
所有电量LED指示灯和所有接口状态指示灯以2Hz的频率闪烁	1. 放电高温保护（电池温度≥149℉/65℃） 2. 放电低温保护（电池温度≤-4℉/-20℃） 3. 充电高温保护（电池温度≥122℉/50℃） 4. 充电低温保护（电池温度≤32℉/0℃）	1. 断开所有连接。 2. 待本机冷却或回暖至室温。 3. 如果本机此前正在为负载供电，请按下接口开关重新打开输出接口，并将负载重新连接至本机。 4. 如果本机此前正在充电，请将本机重新连接至电源，本机将会自动继续充电。
最后一颗电量LED指示灯以2Hz的频率闪烁，随后本机被自动关闭	1. 电池低压保护（电池电压≤9V）	1. 断开所有输出连接。 2. 按下总电源开关重启本机，并按下接口开关。 3. 如果输出接口能够被打开，表明负载功率过大，拉低了电池电压。在这种情况下，请避免将大负载接入本机。

		4. 如果所有输出接口都无法打开，表明本机电量过低，不应该再为负载供电。在这种情况下，请尽快为本机充电，以免对电池造成永久损伤。
所有电量LED指示灯和USB-A接口状态指示灯以2Hz的频率闪烁	1. USB-A接口过流保护（输出电流≥2.6A） 2. USB-A接口短路保护	1. 断开USB-A接口的连接。 2. 如果USB-A接口发生短路，请立刻移除短路。 3. 如果负载消耗的电流大于USB-A接口规格规定的峰值电流，请停止通过USB-A接口为该负载供电。 4. 按下接口开关重新打开输出接口，并只将符合USB-A接口规格的负载连接至本机。
所有电量LED指示灯和DC输出接口以及CIG接口的接口状态指示灯以2Hz的频率闪烁	1. DC输出接口过流保护（输出电流≥6.5A） 2. CIG接口过流保护（输出电流≥12.1A） 3. DC输出接口短路保护 4. CIG接口短路保护 5. DC输出接口倒灌保护	1. 断开DC输入接口和CIG接口的连接。 2. 如果DC输入接口或CIG接口发生短路，请立刻移除短路。 3. 如果负载消耗的电流大于DC输入接口或CIG接口规格规定的峰值电流，请停止通过DC输入接口或CIG接口为该负载供电。 4. 如果电源被错误连接至DC输出接口，请断开电源并通过DC输入接口为本机充电。 5. 按下接口开关重新打开DC输出接口和CIG接口，并只将符合DC输出接口和CIG接口规格的负载连接至本机。

所有电量LED指示灯和USB-C接口的接口状态指示灯以2Hz的频率闪烁	1. USB-C接口过流保护（输出电流≥3.3A） 2. USB-C接口短路保护	1.断开USB-C接口的连接。 2.如果USB-C接口发生短路，请立刻移除短路。 3.如果负载消耗的电流大于USB-C接口规格规定的峰值电流，请停止通过USB-C接口为该负载供电。 4.按下接口开关重新打开USB-C接口，并只将符合USB-C接口规格的负载连接至本机。
所有电量LED指示灯和AC插座的接口状态指示灯以2Hz的频率闪烁	1. AC插座过载保护（输出功率≥200W） 2. AC插座短路保护 3. 逆变器高温保护（逆变器温度≥203℉/95℃）	1.断开所有输出连接。 2.如果AC插座发生短路，请立刻移除短路。 3.如果负载消耗的功率大于AC插座规格规定的额定功率，请停止通过AC插座为该负载供电。 4.如果本机长时间在高负载或高温环境下运行，请在继续使用前先待本机冷却至室温。 5.按下接口开关重新打开AC插座，并只将符合AC插座规格的负载连接至本机。
所有电量LED指示灯和所有正在使用的接口的接口状态指示灯以2Hz的频率闪烁	1. 总输出过载保护（输出功率≥200W）	1.重新分配输出，确保总输出功率在200W以内。 2.按下接口开关重新打开接口开关，并只将必要的负载连接至本机。

常见问题

1. 为什么我的火鸟200无法为其他设备供电？

首先，请按下总电源开关确保本机已打开。然后，请确认本机的电量。如果最后一颗电量指示灯正在闪烁，请立刻为本机充电；如果没有，请按下相应的接口开关确保输出接口已打开。最后，请检查接入的设备是否符合输出接口的规格。如果本机仍然无法为您的设备供电，请参阅故障排除章节或联系我们获取帮助。联系方式请参阅用户指南的最后一页。

2. 我可以更换火鸟200中的电池组吗？

不，火鸟200中的电池组不可更换。请勿尝试拆解火鸟200并自行更换电池组。这样做可能对本机造成不可逆的损伤，甚至引发电池爆炸。

3. 我可以将多台火鸟200连接在一起吗？

不，火鸟200无法相互连接，也无法与其它便携式电源箱连接。如果您正在寻找容量更大的便携式电源箱，请访问我们的官方网站或联系我们以获取更多选择。联系方式请参阅用户指南的最后一页。

4. 火鸟200是否防水？

不，火鸟200不防水。请使本机远离湿气。请勿将本机浸入水中或在雨中使用本机，以免引发短路，触电或者火灾。

5. 为什么火鸟200的运行时间无法达到预期？

电池的容量是指以0.2C的电流恒流放电测得的容量。当火鸟200在为大功耗设备供电时，由于电池内阻的存在，电池会将更多的能量转化为热能，导致可用容量降低。在这种情况下，您可能无法获得189Wh的电能。

售后保修

• RENOGY的产品享有自原始购买日期起为期12个月的有限保修。如果您遇到任何问题，请联系我们以获取帮助。联系方式请参阅用户指南的最后一页。

• 我们仅为RENOGY或RENOGY授权的零售店和分销商销售的产品提供售后服务。如果您从其它渠道购买了本机，请联系您的卖家以获取关于退货和保修的详细信息。

• 请在warranty.renogy.com/support/tickets/new或您所在地区的相应页面上为您的产品进行注册，以便我们能够与您保持联系，并在出现产品召回情况时与您联系。

FCC Compliance：

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, and (2) this device must withstand any interference received, including interference that may cause undesired operation.

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MADE IN CHINA

RENOGY