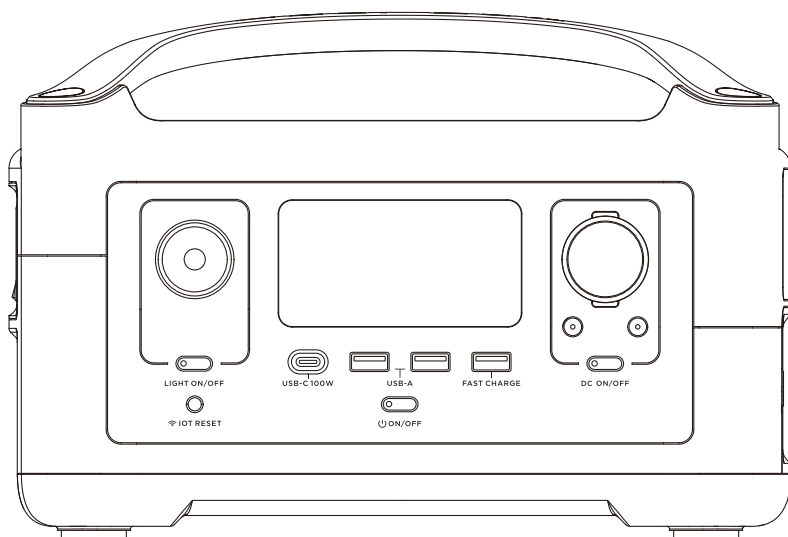


ECOFLOW

User Manual

EcoFlow RIVER



WARNING

1. Keep EcoFlow™ RIVER ("RIVER") and the accessories dry. DO NOT expose the product and accessories to high heat.
2. Never disassemble, puncture, shock, damage, or incinerate the product.
3. Recycle and dispose of RIVER in accordance with local laws and regulations.
4. Pay attention to safety when handling the RIVER.
5. People living with disabilities or children should use the product under adult supervision.

Contact us:
www.ecoflow.com

Glossary

The following terms are used in this document to indicate various levels of potential harm that may be caused by improper operation.

NOTICE

The instructions, if not properly followed, may result in property damage and minor physical damage.

CAUTION

The instructions, if not properly followed, may result in property damage and serious physical damage.

WARNING

The instructions, if not properly followed, may result in property damage, major accident and serious injury.

WARNING

Read the **ENTIRE User Manual before operating**. Failure to operate the product correctly may result in damage to the product or personal property and cause serious injury. EcoFlow will not assume any legal responsibility. **DO NOT** use the product with incompatible components or alter the product in any way without following the instructions provided by EcoFlow. Failure to follow these instructions will render EcoFlow after-sales services and the product warranty void. These Safety Guidelines include instructions for safety, operation and maintenance. It is important to read and follow all the instructions and warnings in the user manual before assembly, set-up, or use.

Product Safety Guidelines

WARNING

Improper use may result in fire, property damage, or personal injury. Make sure to use the product according to the following safety rules and guidelines.

Product Disclaimer

Read all safety tips, warning messages, terms of use and disclaimers carefully. Refer to the terms of use and disclaimer at <https://ecoflow.com/pages/terms-of-use> and stickers on the product before use. Users take full responsibility for all usage and operations. Familiarize yourself with the related regulations in your area. You are solely responsible for being aware of all relevant regulations and using EcoFlow products in a way that is compliant.

Product Use:

1. **DO NOT** expose the product to any liquids. Do not immerse the product in water. **DO NOT** leave the batteries out in the rain or near a source of moisture. Moisture in the RIVER could cause short circuits, component failure, fires or even explosions.
2. Never use non-EcoFlow parts. Go to <http://www.EcoFlow.com> to purchase new parts. EcoFlow takes no responsibilities for any damage caused by the use of non-EcoFlow parts.
3. Never install or remove other modules from the RIVER when it is turned on. **DO NOT** plug or unplug other modules when the power of the product is turned on, otherwise the power interface may be damaged.
4. The use of the product in environments above 140°F (60°C) may cause fires or explosions. The use of the product below -4°F (-20°C) will severely affect the performance of the product. Allow the product to return to a normal operating temperature before using it.
5. **DO NOT** use the batteries in strong electrostatic or electromagnetic environments. Otherwise, the battery control board may malfunction and cause a serious accident during use.
6. Never disassemble or puncture the product in any way. Otherwise, it may leak, catch on fire, or explode.
7. **DO NOT** use the product if it was involved in a crash, accident, or a forceful jolt.

8. If the product falls into the water during use, take the product out immediately and put it in a safe and open area. Keep a safe distance from it until it is completely dry. Never use it again and dispose it properly as described in the Battery Disposal section below. If the product catches fire, it is recommended to use fire extinguishing equipment in the following order: water or water mist, sand, fire blanket, dry powder fire extinguisher and carbon dioxide fire extinguisher.
9. DO NOT put the product in a microwave oven or in a pressurized container.
10. DO NOT allow pins, wires, or other metal pieces to enter the RIVER case, outlets, or controls. Metal pieces may short circuit the product.
11. Avoid collisions. DO NOT place heavy objects on top of the RIVER.
12. If there is dirt on any plug or outlet surface, use a dry cloth to clean it. Otherwise, it will cause abrasion and result in energy loss or the inability to charge.
13. Store the product in a dry and ventilated place.
14. It is recommended to use moisture barrier bags in wet environments (for example, places by the sea or waterways) to prevent the product from getting soaked. If water is found inside the product, it must not be used or turned on again. Please take anti-electric shock measures before touching the product. Following this, place the product in a safe, waterproof and open area. Once complete contact EcoFlow Customer Service immediately.
15. This product is not recommended for powering medical emergency equipment related to personal safety, including but not limited to medical grade ventilators (hospital version CPAP: Continuous Positive Airway Pressure), artificial lungs (ECMO, Extracorporeal Membrane Please follow your doctor's instructions and consult with the manufacturer for restrictions on the use of the equipment. If used for general medical equipment, please be sure to monitor the power status to ensure that the power does not run out.
16. When in use, power supply products will generate electromagnetic fields, which are likely to affect the normal operation of medical implants or personal medical equipment such as pacemakers, cochlear implants, hearing aids, defibrillators etc. If these types of medical equipment are being used, please contact the manufacturer to inquire about any restrictions on the use of such equipment. These measures are fundamental to ensure a safe distance between the medical implants (for example, pacemakers, cochlear implants, hearing aids, defibrillators etc.) and this product while in use.
17. When the power supply is connected in normal mode to a refrigerator, power fluctuations may cause the power supply to automatically shut down. When connecting the power supply to a refrigerator that stores medicine, vaccines or other valuable items, it is recommended to set the AC output to "Always on" in the app. This helps support a continuous power supply and ensures a safe and efficient power consumption state.

Product Charging:

1. Always use EcoFlow approved charging cables. EcoFlow does not take any responsibility for any damages caused by using non-EcoFlow charging cables. DO NOT use RIVER series portable power station AC charging cables on DELTA series power stations. EcoFlow takes no responsibilities for any damages caused by customers' failure to follow instructions. Doing so will void the warranty.
2. When charging, please place the product on the ground with no flammable or combustible materials around it. To prevent accidents, never leave the device unattended during charging.
3. DO NOT charge the product immediately after a long or heavy load, because the product temperature may have become too high. DO NOT charge the product until it cools down to room temperature

Product Storage and Transportation:

1. Keep the product out of the reach of children. If any child accidentally swallows any parts, please seek medical attention immediately.
2. If a low-battery warning appears, charge the battery before storing it. Otherwise, long-term storage may cause damage to the battery. Batteries in the product will enter hibernation mode if they are depleted and stored for a long time. Recharging the product can bring the battery out of hibernation.
3. DO NOT place the product near a heat source, such as inside a car in direct sunlight, a fire source, or an operating stove.
4. Store the product in dry environments. Please keep it away from water.
5. Make sure no small metal objects can fall on or around the product while it's being stored.
6. Never ship a product with a battery power level higher than 30%.

Product Battery Disposal:

1. Dispose of RIVER in specific recycling boxes only after a complete discharge. Batteries are hazardous chemicals. Please strictly follow your local regulations regarding the battery disposal and recycle.
2. Dispose of the product if it cannot be powered on after over-discharging.

Travel Notice:

Do not bring this product on flights.

RIVER Usage and Safety Guide

Congratulations!

You are now an EcoFlow RIVER user. This brief pamphlet is meant to help you. Please take some time to read it carefully before using the product.

NOTICE

To turn RIVER on or off, you need to PRESS and HOLD the ON/OFF System Power Button. To turn on the AC power outlet, you need to PRESS and HOLD the AC Button after turning on RIVER. The AC Button can be used to save power. Please follow this step-by-step introduction to understand RIVER's buttons, display screen, and more. Please fully charge (100%) RIVER before using it.

FCC Statement:

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

- (1) This product may not cause harmful interference, and
- (2) This product must accept any interference received, including interference that may cause undesired operation.

WARNING

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

NOTICE

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. Orient 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 20cm between the radiator & your body.

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EcoFlow App Guide

1. EcoFlow App Download Guide

Search for “EcoFlow” in Google Play Store or App Store to download the app. You can also scan this QR code with your phone, or you can enter the download link in your browser:

<https://ecoflow.com/pages/ecoflow-app>

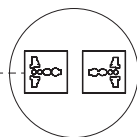
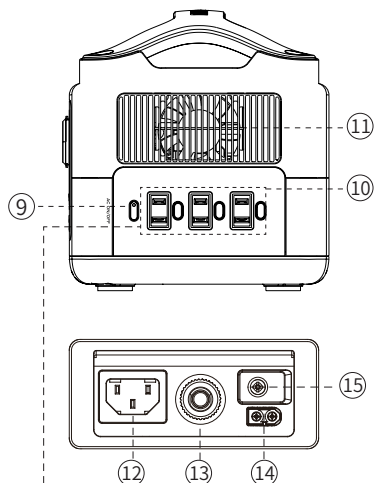
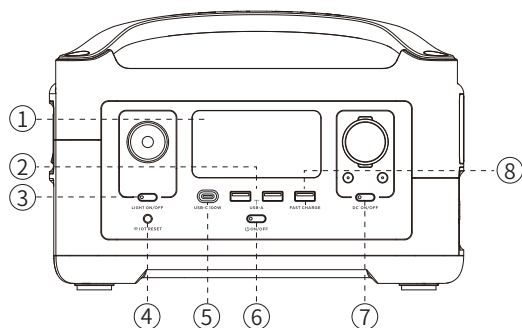
2. For more information about the App, please follow the instructions in the app or on our official website www.ecoflow.com.



Privacy Policy

By using EcoFlow Products, Applications and Services, you consent to the EcoFlow Term of Use and Privacy Policy, which you can access via the “About” section of the “User” page on the EcoFlow App or on EcoFlow Official website at <https://ecoflow.com/pages/terms-of-use> and <https://ecoflow.com/pages/privacy-policy>.

RIVER Features

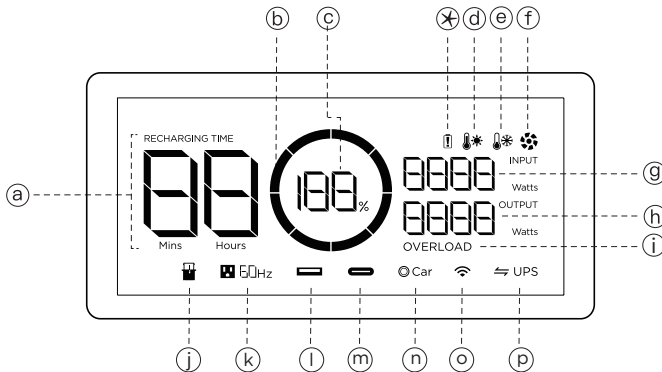


220-240V Dedicated AC Output*

*EcoFlow has designed different AC output sockets following the local regulations of different countries

1. LCD Display
2. USB-A Output Ports
3. LED Light ON/OFF Button
4. IOT Reset Button
(PRESS & HOLD for 3s to reset Wi-Fi)
5. USB-C 100W Output Port
6. ON/OFF & Power Indicator
7. DC Output ON/OFF Button (Car Outlet, 2 DC 5521 Output Ports) & DC Output Indicator
8. Fast Charge USB-A Output Port
9. AC Power Button (PRESS to turn the product ON/ OFF) & AC Output Indicator
10. 3 AC Output Sockets (100-120V version)
2 AC Output Sockets (220-240V version)
11. Ventilation Fan
12. X-Stream Charging Input Port
13. Overload Protection Switch
14. Solar Charge / Car Charge Input Port
15. Power Earth Screw

Display Interface Introduction



a. Remaining Charge/Discharge Time

This number indicates the remaining charge / discharge time (mins) for RIVER.

b. Battery Level Indicator

Shows the remaining power. The icon rotates while charging. . If the remaining power is equal to 0%, the icon will flash to indicate a low battery warning. In this case, recharge the product.

c. Battery Level Percentage

Shows the remaining power (%). If the display shows 0%, please charge RIVER immediately.

d. High Temperature Indicator

When the temperature of the RIVER is too high, a high-temperature warning icon appears on the screen. Please cool down the product before use.

e. Low Temperature Indicator

When the temperature of the RIVER is too low, a low-temperature warning icon appears on the screen. Please warm up the product properly before use.

f. Fan Indicator

Shows the fan speed, which is controlled by RIVER automatically.

g. Current Input

Shows the current input power of RIVER in watts.

h. Current Output

Shows the current output power of RIVER in watts.

i. Overload Warning

The overload icon appears along with a second icon indicating what part of the RIVER is in an overload condition.

✕. Battery Indicator

Refers to the battery

Port Usage Indicators

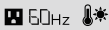
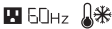
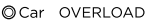
j	Extra Battery Indicator 	The Extra Battery icon will appear when Extra Battery is connected to the main model.
k	AC Indicator  60Hz	The AC indicator icon will appear when the AC power button is turned on.
l	USB-A Indicator 	The USB-A output icon will appear on the LCD display when a USB-A port is in use.
m	USB-C Indicator 	The USB-C output icon will appear on the LCD display when a USB-C port is in use.
n	Car Power Output Indicator  Car	The Car Power Output icon will appear on the LCD display when a Car Output port is in use.
o	IOT Indicator 	The icon will appear when the unit is connected to the App.
p	UPS Indicator  UPS	When the SOC (State of Charge) is set in the EcoFlow App, the UPS icon will appear on the screen.

Protection and Error Information

The RIVER display screen showcases different icons to indicate errors or prompts. Read the information below to understand the icons and what to do when they appear.

 OVERLOAD	USB-A Overload Protection	USB-A and OVERLOAD icons flash together. Disconnect all electrical appliances and wait 10 seconds before connecting each appliance again.
	USB-C High-Temperature Protection	USB-C and High-Temperature icons flash together. Disconnect all electrical appliances and wait until RIVER has cooled down before connecting each appliance back.
 OVERLOAD	USB-C Overload Protection	The USB-C icon and the OVERLOAD icon flash together. Disconnect electrical appliance and wait 10 seconds before adding appliance back.

RECHARGING TIME  	High-Temperature Recharging Protection	Recharging Time, Battery Exclamation, and High-Temperature icons flash together. This will happen especially when you recharge the RIVER immediately after a heavy battery use. Disconnect Charging Cables and all electrical appliances and wait until RIVER has cooled down before plugging Charging Cable back in and recharging.
 	High-Temperature Discharging Protection	Battery Exclamation and High-Temperature icons flash together. Turn OFF System Power and let RIVER cool down before turning the System Power back on.
RECHARGING TIME  	Low-Temperature Recharging Protection	Recharging Time, Battery Exclamation, and Low-Temperature icons flash together. Disconnect Charging Cables and all electrical appliances and place RIVER in warmer place before plugging Charging Cable back in and recharging.
 	Low-Temperature Discharging Protection	Battery Exclamation and Low-Temperature icons flash together. Turn OFF System Power and place RIVER in warmer place before turning the System Power back on.
RECHARGING TIME  OVERLOAD	Overload Recharging-protection	Recharging Time, Battery Exclamation, and OVERLOAD icons flash together. Unplug the charging cables, restart the RIVER, and plug back the charging cables back in.
 OVERLOAD	Overload Discharging Protection	Battery Exclamation and OVERLOAD icons flash together. Disconnect all appliances, restart the RIVER, and add each appliance back in in turn. Please note that electrical appliances must be operated within rated power.
 - - - -	Communication Failure between the Main Board and BMS	Exclamation icon flashes. Restart the RIVER.
	Light stays on	Exclamation icon flashes. Restart the RIVER.
 50Hz	Communication Failure between the Main Board and AC	AC icon flashes. Restart the RIVER.
 50Hz OVERLOAD	Inverter Output Overload	AC and OVERLOAD icons flash together. Turn off RIVER. Unplug all appliances. Wait 10 seconds, turn System Power ON then AC Power ON and plug each appliance back in in turn. If the icons keep flashing, do not charge or discharge the unit. Please note that electrical appliances must be operated within rated power. (For more information about X-Boost function, go to P10.

	Inverter High-Temperature Protection	AC and High-Temperature icons flash together. Turn off RIVER and let it cool down. Then turn System Power On and AC Power On.
	Inverter Low-Temperature Protection	The AC and Low-Temperature icons flash together. Turn off RIVER, move RIVER to a warmer place and wait for the inverter to warm up. Turn the AC Power off; the unit will automatically recover.
	Fan Blockage	Fan icon flashes. Turn the RIVER off, carefully clean, and vacuum around the fan vents on both ends of the product. Then turn the RIVER on.
	Car Charger Overload	Car and OVERLOAD icons flash together. Restart RIVER, make sure all electrical appliances are used within the specified power range.
	Car Charger High-Temperature Protection	Car and High-Temperature icons flash together. Turn RIVER off and let it cool down. Turn System Power On then DC Power On.

*If the product is not operating properly or the icon keep flashing, please contact the customer support team. Do not charge the unit.

Connecting the Solar Panels

The RIVER can support a 10-25V DC input. When the input exceeds 25V, the RIVER overvoltage protection will be activated. Overvoltage may damage the product. Users should read these instructions carefully because any incorrect use of solar panels that leads to product damage will void the EcoFlow warranty.

How to Recharge the RIVER Using Solar Panels

For full step-by-step instructions about how to connect RIVER with solar panels, please refer to the Solar Panel User Guide.

1. Recommend Charging Method

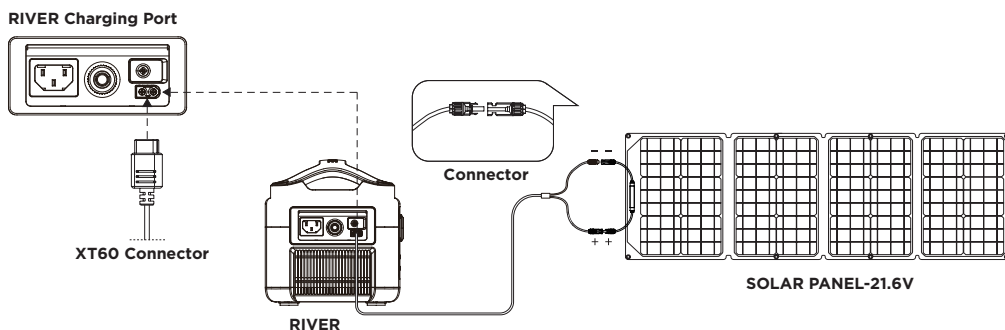
Users can connect a solar panel as shown in Example 1. DO NOT attempt to connect more than one solar panel in series.

1. Connect the solar panel to the Solar to XT60i Charging Cable. Connect the XT60 connector to the RIV-ER's XT60 input port to charge the device. Users can connect up to 2 sets of solar panels in parallel to the MC4 port as shown in Example 2.

2. If you want to connect 2 sets of solar panels, connect them with our solar MC4 parallel connection cable and connect the solar MC4 parallel connection cable to the Solar to XT60i Charging Cable. Then Connect the XT60 connector to the RIVER's XT60 input port to charge the device. The parallel connection cable is an optional accessory that is purchased separately.

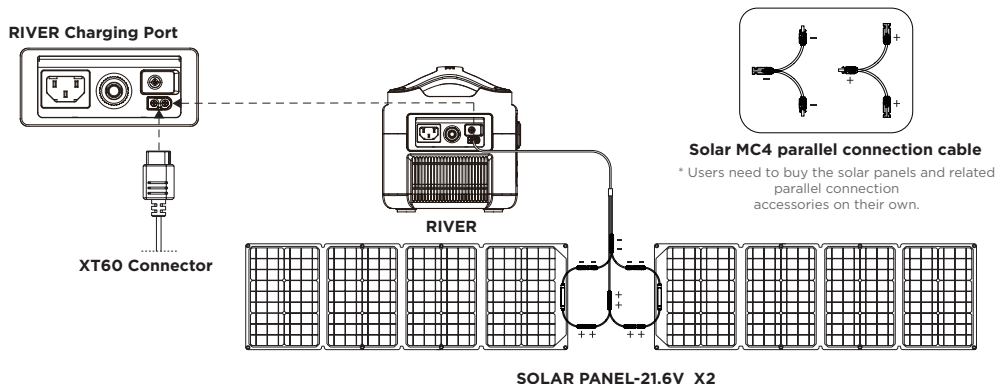
Note: The EcoFlow Solar MC4 Parallel Connection cable is an optional accessory that needs to be purchased separately. The charging methods below are with respect to using the EcoFlow 110W Solar Panel.

Charging Method 1



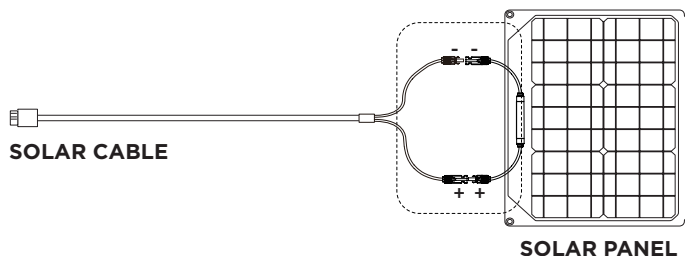
*Solar charging cable (Solar to XT60i Charging Cable) is supplied separately.

Charging Method 2: (Parallel Connection Only)



2. Connecting Third-Party Solar Panels to RIVER

Users can buy their own third-party solar panels to power RIVER, provided that the solar panels have a standard MC4 connection and the voltage and current (10-25V DC, 12A Max) comply with the specifications of RIVER. The third-party solar panels will be able to recharge RIVER through the MC4 to XT60 cable. EcoFlow does not provide free repair services for any damage to the power station caused by third-party products.



Entry-Level UPS

RIVER Entry-level UPS Use Reminder

RIVER's X-Stream system supports an entry-level UPS function. You can use the RIVER AC socket while the RIVER is connected to an AC power source (your devices or appliances connected the RIVER AC socket will get power from the AC power source, not the RIVER battery). When the AC power source loses power suddenly, the RIVER will switch to provide power to the devices and appliances connected to it in <30ms. This is considered as an "entry-level" grade UPS function that does not support 0ms switching.

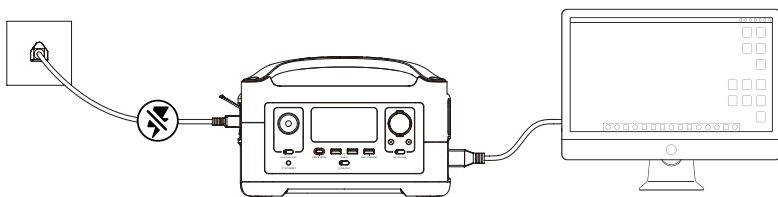
Do not connect devices with strict uninterrupted power supply requirements. Please perform multiple tests with data servers and workstations when connecting them to RIVER. **EcoFlow will not be responsible for any loss of data or equipment damage caused by failure to follow these instructions.**

In accordance with the UL2743 standard, the AC outlets of the RIVER are in a double blade, ungrounded configuration, it is recommended to use the UPS function only for temporary emergency usage rather than for long-term usage. DO NOT connect the RIVER to devices or electrical appliances with bare metal when charging to avoid the risk of electric shock.

Entry-Level UPS User Guide

Users can connect the AC charging cable of RIVER to an AC power source connect a device to RIVER, and turn on the AC switch to automatically enter the entry-level UPS mode. When the AC power source is cut off, power will be supplied from the battery of RIVER immediately to power your device (as shown below).*

UPS is only applicable to electrical appliances below 600W. To avoid an Overload condition, do not attempt to power any equipment drawing more than 600W of power. EcoFlow will not be responsible for any loss of data or equipment damages caused by careless use or customers' failure to follow the instructions. Only one RIVER can conduct the UPS function; the UPS function is not available when more than one RIVER is connected together. Please follow the connection instructions below:



AC X-Boost Mode

With the built-in 600W inverter, you can use the X-Boost feature to power 600W-1200W appliances without the disruption caused by overload protection. Traditional inverters will overload when one electrical appliance with a higher rated power is connected. Meanwhile, RIVER's built-in inverter, which has the X-Boost feature, enables the powering of 600W-1200W electrical appliances. Please take note of the following when using X-Boost:

- 1. The X-Boost mode is enabled by default. You can use the EcoFlow App to turn this function on/off.**
- 2. The X-Boost mode is not available in the following situations: the charging state and X-Boost mode off state. ;**
- 3. When using appliances with a rated power of 600W-1200W, please connect only one appliance. When connecting more than one electrical device, the change of voltage may affect the usage of other electrical devices.**

* You may use electrical appliance with heating elements and a rated power between 600W-1200W, such as hair dryers and electric kettles. But the X-Boost mode is not applicable for all electrical devices. Some devices with a rated power of 600W-1200W that have strict voltage requirements are still not compatible. Please conduct a full test to confirm before usage. It is not recommended to use the RIVER to charge heavy-duty devices, such as air conditioners, coffee machines, clothes dryer, electric camp stoves, full size refrigerators, microwaves, mowers, ovens, washing machines etc.

Technical Specifications

General Specs

Net Weight	11lbs (5kg)
Dimensions	11.3in x 7.3in x 7.7in (28.8cm x 18.5cm x 19.4cm)
Capacity	288Wh (28.8V)
Testing and certification	UL Standard, CE, FCC, RoHS, RCM

Outputs

AC Output (x3) / (x2 International Version) Full Sine Wave	600W (Surge 1200W) total, 120Vac (50Hz/60Hz) / 230Vac (50Hz/60Hz)
USB-A Output (x2)	5V DC, 2.4A, 12W Max, per port
USB-A Fast Charge (x1)	5V DC, 9V DC, 12V DC, 2.4A, 28W Max
USB-C Output (x1)	5V DC, 9V DC, 12V DC, 15V DC, 20V DC, 5A, 100W Max
Car Power Output (x1)	136W, 13.6V DC, 10A Max
DC5521 Output (x2)	13.6V DC, 3A Max(per port)

Input

AC Charge Input Voltage	100-120Vac (50Hz/60Hz) International Version 220-240Vac (50Hz/60Hz)
AC Charge Input Power (Example 1)	X-Stream Charge 250W Max
Solar Charge Input	200W 10-25V DC 12A max
Car Charger (Example 2)	12V DC 8A max

Battery

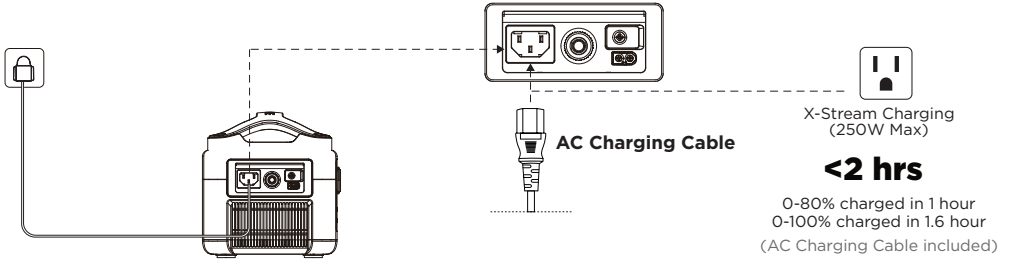
Cell Chemistry	Lithium-ion
Discharge Temperature	-4°F to 140°F (±5°F), -20°C to 60°C (±3°C)
Charge Temperature	32°F to 113°F (±5°F), 0 to 45°C (±3°C)
Shelf Life	1 Year (after fully charging the device)
Cycle Life	500 cycles to 80%+ capacity

* Please Note: The following information has been obtained under supervised test conditions.

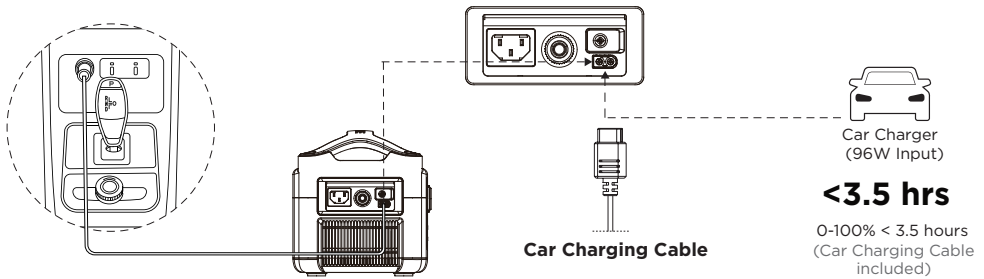
How to Recharge RIVER

RIVER has an AC charging port and an XT60 charging port located on the side. RIVER can be charged with a 12V car charger, solar panels, or with AC power.

Example 1:



Example 2:



Can RIVER Power Devices and Charge at the Same Time?

Yes, RIVER can power devices at the same time as charging.

RIVER FAQ

How to Clean RIVER?

RIVER is a versatile, durable power station that can be used in many types of applications. You can clean RIVER using a dry, non-abrasive cloth. Use detergent that is used for cleaning mobile phones and computer screens if you need to clean RIVER more thoroughly. DO NOT expose RIVER to excessive amounts of liquid, as doing so can damage the product or result in injury.

How to Store RIVER?

Store RIVER in a dry and cool environment, away from any abrasive objects. DO NOT store or place RIVER near water. Please turn off the RIVER and store it within its recommended use and storage temperature range. If you need to store the RIVER for a long time, please discharge the RIVER to 30%, then charge it to 85% every 3 months.

How to Use RIVER Safely?

Please use RIVER in its recommended operating temperature range. Using RIVER out of the recommended operating temperature range may cause the power station to exceed safe and effective working limits. RIVER is not waterproof. DO NOT immerse RIVER in water. Doing so will void the warranty.

If RIVER is used to power electrical devices with heating elements for over 30 minutes, such as a hairdryer, the power station will enter a high-temperature protection mode. Please wait for about 1 hour before charging the River, or using it to power devices again.

How to Upgrade RIVER Firmware?

The firmware can be upgraded using the EcoFlow App. Turn on the RIVER before firmware upgrade. It is recommended that the RIVER is connected to an AC power source or has about 50% battery level when upgrading. Please do not use RIVER to recharge your appliances and devices during firmware upgrade. For more details, please refer to "How to upgrade firmware" FAQ in the EcoFlow App.

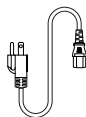
Is RIVER compatible with RIVER Plus Extra Battery?

No. RIVER is not compatible with RIVER Plus Extra Battery, which is designed to be used with RIVER Plus only. RIVER Plus is not compatible with RIVER Extra Battery, which is designed to be used with RIVER only.

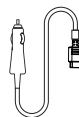
What's in the Box



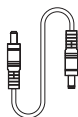
RIVER



**AC Charging Cable
(1.5m)**



**Car Charging Cable
(1.5m)**



**DC5521-DC5525
Cable**



**User Manual and
Warranty Card**

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