

# **EcoFlow MR500 DELTA Pro MIDI Keyboard Controller User Manual**

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#### **Specifications**

General Info				
Net Weight	Approximately 45kg (99 lbs)			
Dimension (L × W × H)	635×285×416mm / 25 × 11 × 16 in			
Capacity	3,600Wh, 48V			
Wi-Fi	Frequency Range: 2412-2472/2422-2462MHz Maximum Output Power: 1 3.49dBm			
Bluetooth	Frequency Range: 2402-2480MHz Maximum Output Power: -0.31dBm			
Output Ports				
AC (×5)	Pure sine wave, 3,600W total (surge 7,200W), 230V~(50Hz/60Hz)			
USB-A (×2)	5V 2.4A, 12W Max per port, total 24W			
USB-A Fast Charging (×2)	5V 2.4A 9V 2A 12V 1.5A, 18W Max per port, total 36W			
USB-C (×2)	5/9/12/15/20V 5A, 100W Max per port, total 200W			
Car Charger	12.6V 10A, 126W Max			
DC5521 Output (×2)	12.6V 3A, 38W Max per port			
Anderson Output	12.6V 30A, 378W Max			
Input Ports				
AC Charge	230V~ 2875W Max			
AC Input Voltage	100-120V~ 12.5A, 220-240V~ 12.5A, 50Hz/60Hz			
Solar Charger	11-150V 15A Max, 1,600W Max			
Car Charger	Supports 12V/24V Battery, default 8A			
Battery Info				
Cell Chemistry	LFP			
Cycle Life	3,500 cycles to 80% + capacity			
Protection Type	Over Voltage Protection, Overload Protection, Over Temperature Protection, Short Circuit Protection, Low Temperature Protection, Low Voltage Protection, Overcurrent Protection			

Operating Temperature			
Optimal Operating Temperature	20°C~30°C		
Discharging Temperature	-10°C~45°C		
Charging Temperature	0°C~45°C		
Storage Temperature	-10°C~45°C (optimal: 20°C~30°C)		
Add-ons (sold separately)			
DELTA Pro Smart Extra Battery	Up to two units		
EcoFlow Smart Generator			
DELTA Pro Remote Control	Wired or wireless		
EV X-Stream Adapter	Charge from electric vehicle charging		

- 1. A car charger shares power with the DC5521 output port, offering a maximum output of 126W.
- 2. Whether the product can be charged or discharged depends on the actual temperature of the battery pack.



#### **Usage**

- 1. Do not use the product near a heat source, such as a fire source or a heating furnace.
- 2. Avoid contact with any liquid. Do not immerse the product in water or get it wet. Do not use the product in rain or humid environments.
- 3. Do not use the product in an environment with strong static electricity/magnetic fields.
- 4. Do not disassemble the product in any way or pierce the product with sharp objects.
- 5. Avoid using wires or other metal objects that may result in a short circuit.
- 6. Do not use unofficial components or accessories. If you need to replace any components or accessories, please visit official EcoFlow channels to check relevant information.
- 7. When using the product, please strictly follow the operating environment temperature specified in this user manual. If the temperature is too high, it may result in a fire or explosion; if the temperature is too low, the product performance may be severely reduced, or the product may cease to work.
- 8. Do not stack any heavy objects on the product.
- 9. Do not lock the fan forcibly during use. Usage
- 10. Please avoid impact, falls, or severe vibrations when using the product. In case of a severe external impact, turn off the power supply immediately and stop using the product. Ensure the product is well fastened during transportation to avoid vibrations and impacts.
- 11. If you accidentally drop the product into water during use, please place it in a safe open area, and stay away from it until it is completely dry. The dried product should not be used again, and should be properly disposed of according to section "Disposal Guide". If the product catches fire, we recommend that you use the fire extinguishers in the following **order:** water or water mist, sand, fire blanket, dry powder, and finally a carbon dioxide fire extinguisher.

- 12. Use a dry cloth to clean off dirt on the product ports.
- 13. Rest the product on a flat surface to avoid damages caused by the product falling over. If the product is overturned and severely damaged, turn it off immediately, place the battery in an open area, keep it away from combustible matter and people, and dispose of it in accordance with local laws and regulations.
- 14. Ensure that the product is kept out of reach of children and pets.
- 15. Store the product in a dry and ventilated place.
- 16. 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 eletric 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.
- 17. This product is not recommended for powering medical emergency equipment related topersonal 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.
- 18. 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 measure 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.
- 19. 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.



Operation of this equipment in a residential environment could cause radio interference.

#### **Disposal Guide**

- If conditions permit, make sure that the battery is fully discharged before disposing it in a designated battery
  recycling bin. The product contains batteries with potentially dangerous chemicals, so it is strictly prohibited to
  dispose of it in ordinary trash cans. For more details, please follow the local laws and regulations on battery
  recycling and disposal.
- 2. If the battery cannot be fully discharged due to a product failure, please do not dispose of the battery directly in the battery recycling box. In such case, you should contact a professional battery recycling company for further processing.
- 3. Please dispose of over-discharged batteries that cannot be recharged.

#### **EcoFlow App**

Control, monitor and customize your EcoFlow DELTA Pro from afar with the EcoFlow App. Download at: <a href="https://download.ecoflow.com/app">https://download.ecoflow.com/app</a>



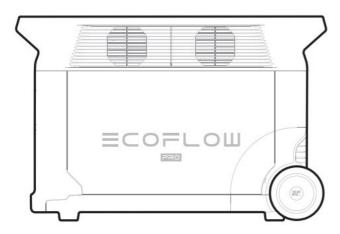
#### **Privacy policy**

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 the official EcoFlow website at

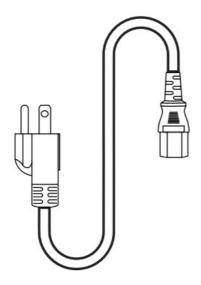
https://www.ecoflow.com/policy/terms-of-use and https://www.ecoflow.com/policy/privacy-policy

What's in the Box

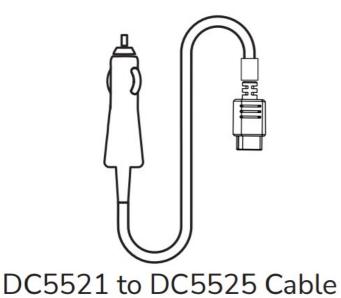
### **DELTA Pro**

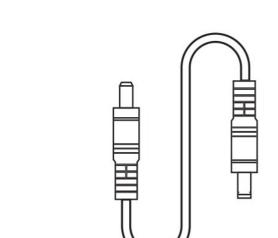


## **AC Charging Cable**

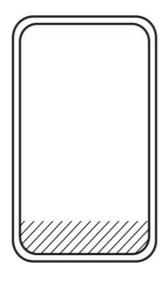


## Car Charging Cable

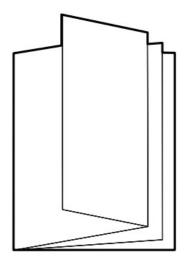




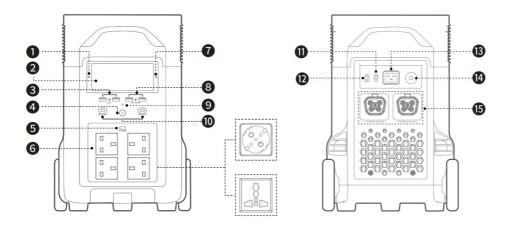
Handle Cover



# User Manual & Warranty Card

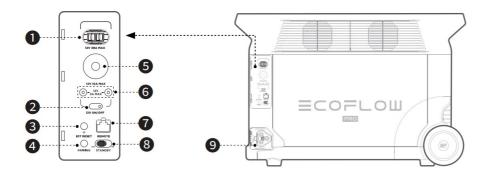


#### Overview



- 1. Ambient light detector
- 2. LCD screen
- 3. USB-A output port
- 4. Main power button
- 5. AC power button
- 6. AC output sockets
- 7. Pairing indicator
- 8. USB-A fast chargingoutput port
- 9. Main power button indicator
- 10. USB-C 100W output port
- 11. AC charge speed switch
- 12. Solar/car charging input port
- 13. X-Stream charging input port
- 14. Overload protection switch
- 15. Extra battery port

The type of AC socket varies in different countries or regions, the picture above is for illustration only, please refer to the actual product.



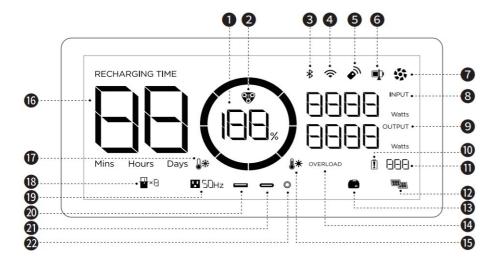
- 1. Anderson port
- 2. 12V DC power button
- 3. IOT button
- 4. Pairing button
- 5. Car outlet
- 6. DC5521 output port
- 7. Remote control port
- 8. Bluetooth standby switch
- 9. Infinity port

## A Bluet

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After the Bluetooth standby switch is turned on, DELTA Pro still works with the mainpower button turned off, use EcoFlow app or remote control (sold separately) to turn on/off the product (Bluetooth standby has a certain amount of power consumption, please turn it off if you don't need to remotely control the product).

#### **LCD Screen**

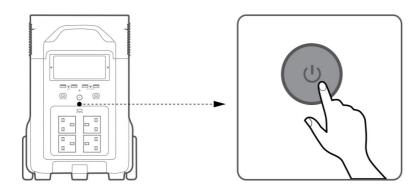


- 1. Remaining battery percentage
- 2. EV X-Stream charging indicator
- 3. Bluetooth connection

- 4. WiFi connection
- 5. Remote control
- 6. State of charge
- 7. Fan indicator
- 8. Input power
- 9. Output power
- 10. Battery failure warning
- 11. Error code
- 12. Solar charging
- 13. Smart generator
- 14. Overload warning
- 15. High temperature warning
- 16. Remaining charge/discharge time
- 17. Low temperature warning
- 18. Extra battery
- 19. AC output
- 20. USB-A output
- 21. USB-C output
- 22. DC output

#### Power On/Off

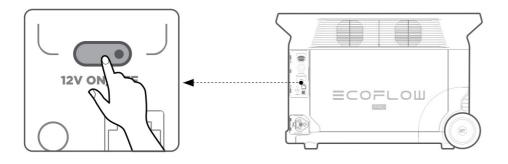
Press the main power button once to turn on the product, then the LCD screen lights up and the main power indicator becomes breathing white; press and hold the main power button for at least 3 seconds to turn off the product, meanwhile, the LCD screen also goes off.



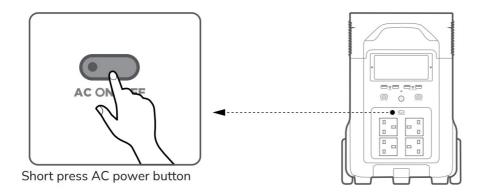
- 1. After main power turned on, press the main power button once to turn off the LCD screen
- 2. If the product is not used for 5 minutes, it will enter hibernation state with the LCD screen gone off. When you start to use the product again, the LCD screen will turn on automatically.
- 3. The product defaults to 2 hours of standby time. With the output power buttons turned off and no other load for 2 hours, the product will shut off automatically. You can set the standby duration in the app.

#### **Charging Your DeviceS**

Press "12V DC power button" or "AC power button" once to turn on their corresponding DC/ AC ports or sockets; press again to turn them off.



#### Short press 12V DC power button

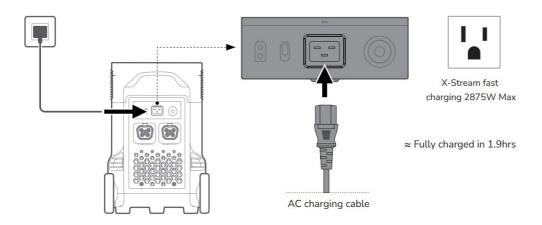


- 1. Please make sure that the product is turned on.
- 2. After the DC output power button is turned on, the product will not shut off automatically.
- 3. Make sure that the sum power of all loaded devices is lower than that of the rated power.
- 4. After 12 hours without any load for the AC output ports, the AC power button will shut down automatically

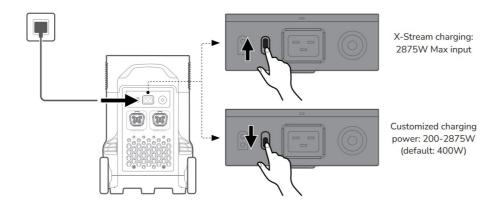
#### **Charging DELTA Pro**

#### **AC Charging**

EcoFlow's X-Stream fast charging technology is specifically for AC charging, offering 1800W of max input power. You can control the charging power through the AC charging Speed Switch. The default max input power for the AC charging speed is 400W, which can be modified in the EcoFlow app. In case of unusual situations where the AC input current remains higher than 20A, the X-Stream charging input port will initiate a self-protection function, and the Overload Protection Switch on the product will automatically pop up. After confirming that there is no product failure, you can press the Overload Protection Switch to resume charging.

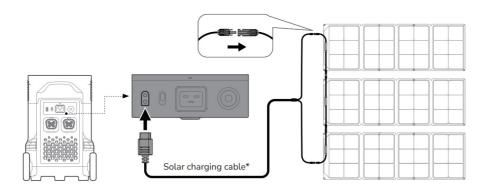


The charging power can be adjusted through the AC Charge Speed Switch on the back of the product. You can set the charging power range in the EcoFlow App.



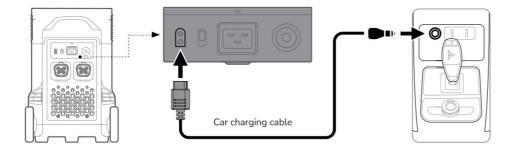
Please use the AC Charging Cable included in the package for fast charging. Do not use other cables to charge. Plug directly into an AC wall outlet and makesure that the wall output current is more than 15A. Otherwise, reduce the unit charging speed with the AC Charge Speed Switch. EcoFlow takes no responsibilities for any consequences caused by failures to follow instructions, including but not limited to charging with other AC charging cables.

#### **Solar Charging**



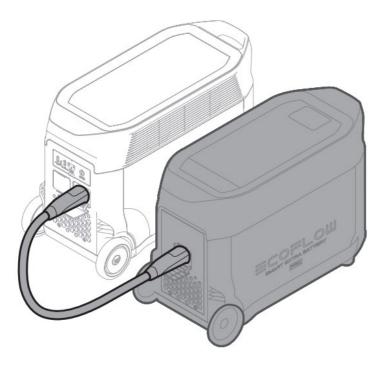
- 1. Solar charging cable (MC4-XT60 adapter cable) and the solar panel are supplied separately.
- 2. When using an EcoFlow solar panel to charge the product, please follow the instructions that come with the solar panel.
- 3. Before connecting the solar panel, please ensure that the solar panel's output voltage is within 150V to avoid product damages.

#### **Car Charging**



Users can recharge the product through the Car Outlet. It supports 12V/24V car chargers and an 8A default charging current. Please charge using the car charger after you've started the car to avoid failure to start due to insufficient car battery. In addition, please make sure that the cigarette lighter of the Car Outlet and the Car Charger Input Cable are in good condition. EcoFlow takes no responsibilities for any losses or damages caused by failures to follow instructions.

#### **Smart Extra Battery**



A single DELTA Pro can link with up to two Smart Extra Batteries at once for added capacity. Refer to the user manuals of the Smart Extra Battery and Smart Generator for detailed instructions.

- 1. Turn off both the Smart Extra Battery and DELTA Pro before connecting or disconnecting them.
- 2. Before using, make sure both DELTA Pro and Smart Extra Battery display the extra battery icon on their screens.
- 3. Turn off the Smart Battery before connecting or disconnecting it.
- 4. Do not touch the metal terminals of the Smart Extra Battery connector. If the metal terminals need to be cleaned, gently wipe them with a dry cloth.

#### X-Boost and EPS

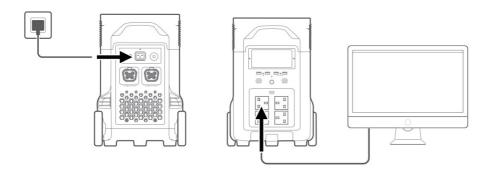
With EcoFlow X-Boost technology, the product can power a 4,500W max. device while the rated output power remains 3,600W, avoiding operation failure due to ovverload protection. X-Boost Tips:

- 1. X-Boost is not available when the AC output is turned on in a recharging state (in bypass mode).
- 2. X-Boost is not applicable for all electrical appliances; it's incompatible with appliances with strict voltage requirements and a rated power over 3600W. Appliances with voltage protection (such as precise instruments) are not supported. X-Boost mode is more suitable for heating devices. Please conduct your own tests with your devices with X-Boost enabled.

Bypass mode: When the product is plugged into the power socket for recharging and connected to other devices at the same time, it cannot provide power to the devices if the AC power button is turned on, instead, the devices are powered by the grid.

The product supports EPS. When you connect the grid power to the AC Input Port of the product through an AC cable, you can power electrical devices through the AC Output Port (AC power will come from the grid and not the power station in this situation). In case of asudden blackout, the product can automatically switch to the battery powered supply mode within 30ms.

As a basic UPS function, this function does not support 0ms switching. Please do not connect the product to any device that requires 0ms UPS, such as data servers and workstations. Please test and confirm the compatibility before using the product. We recommend that you only charge one device at a time and avoid using multiple ones at the same time to avoid overload protection. EcoFlow takes no responsibilities for any device failures or data losses caused by failures to follow instructions.



#### **FAQ**

#### 1. What battery does the product use?

High-quality LFP battery.

#### 2. What devices can the product's AC output port power?

With 3600W rated power and 7200W peak power, the product's AC output ports can power most household appliances. Before you use it, we recommend that you confirm the power of the appliances first and ensure the sum power of all loaded appliances is lower than that of the rated power.

#### 3. How long can the product charge my devices?

The charging time is shown on the product's LCD Screen, which can be used to estimate the charging time of most appliances with stable power usage.

#### 4. How do I know if the product is charging?

When it's charging, the remaining charging time will be shown on the LCD Screen Meanwhile, the charging indicator icon begins to rotate with the remaining battery percentage and the input power shown on the right of the circle.

#### 5. How do I clean the product?

Gently wipe it with a dry, soft, clean cloth or paper towel.

#### 6. How do I store the product?

Before storing, please turn off the product first, and then store it in a dry and ventilated place at room temperature. Do not place it near water sources. For long term storage, please discharge and recharge the product every three months to extend its battery life.

#### 7. Can I bring the product on a plane?

No.

#### **Storage and Maintenance**

1. Ideally, use and store the product in a place of between 20°C ~ 30°C, and always keep it away from water,

- intense heat, and sharp objects. For an extended product lifespan, do not store it in places of temperatures above 45°C or below -10°C.
- 2. For long-term storage, please discharge the product every three months (firstly discharge it to 0%, then fully recharge it, and lastly discharge it to 60%); the product will not be covered by the warranty if it is not charged or discharged for more than 6 months.

#### **Troubleshooting**

Indicator	Problem	Solution
(Flashing)	USB-A Overload Protection	Resume normal operation by removing the electrical device connected to the USB-A port.
(Flashing)	USB-C Overload Protecti on	Resume normal operation by removing the electrical device connected to the USB-C p ort.
(Flashing)	T USB-C High empe rature Protection	After the product cools down, it will resume normal operation automatically.
(Flashing)	High Temperature Charg e Protection	Charging can be resumed automatically aft er the battery cools down.
(Flashing)	High Temperature Disch arge Protection	The power supply can be resumed automatically after the battery cools down.
(Flashing)	Low Temperature Charg e Protection	Charging can be resumed automatically aft er battery temperature rises above 5°C (41° F).
(Flashing)	Low Temperature Discha rge Protection	The power supply can be resumed automatically after the battery temperature rises above -12°C (10°F).

(Flashing)	AC Output Overload Pr otection	Normal operation will be resumed automatic ally after you remove the overloaded device and restart the product. Electrical appliances should be used within rated pow er. (Refer to X-Boost instructions to get more details about power limitations).
(Flashing)	AC High Temperature Pr otection	Please confirm whether the fan inlet and ou tlet are blocked, if not, normal operation will be resumed automatically after the product t emperature drops.
(Flashing)	AC Low Temperature Protection	Normal operation will be resumed automatic ally after the product is used at optimum en vironmental temperatures.
(Flashing)	Fan Blockage	Please check if the fan is blocked by foreign materials.
(Flashing)	Car Charger Overload P rotection	The product will resume normal operation a utomatically after you remove the device connected to the car charger.
(Flashing)	Car Charger High Tempe rature Protection	After the product cools down, it will resume normal operation automatically.
(Stays on)	Battery Failure	Contact EcoFlow customer service.

#### **Documents / Resources**





EcoFlow MR500 DELTA Pro MIDI Keyboard Controller [pdf] User Manual

MR500 DELTA Pro MIDI Keyboard Controller, MR500, DELTA Pro MIDI Keyboard Controller, MI DI Keyboard Controller, Keyboard Controller

