

UC-PD6

6ch USB PD Power Supply



Instruction Manual

PD

Thank you for purchasing the UC-PD6. This UC-PD6 is the charger which supports USB PD (Power Delivery) function. We strongly recommend reading this Instruction Manual on how to best use the UC-PD6. Please keep this manual for your reference. If you have any additional questions, please contact your local IDX office listed at the end of this manual.

Caution for safety use

Please be sure to read the Instruction Manual and follow the instructions. Failure to follow the instructions may cause an electric shock, injury, fire or malfunction.

⚠ WARNING

May cause sudden serious injury and death

- Do not connect to an AC power source that exceeds the voltage specification stated on the unit.
- Use only with the compatible batteries listed in this manual.
- Do not short the contact pins with any metal object.
- Do not carry or store with metal equipment.
- Do not immerse in water.
- Do not attempt to open the outer casing or break apart.
- Keep away from extreme physical impact or pressure, or place any object across the terminals that could cause it to short.
- Protect the power cord from any damage.
- Do not attempt to use if damaged.
- Do not use the charger which has damages on the cable and connector is deformed.
- Leave at least 10 cm of open space around the unit to avoid blocking the air intake and exhaust vents located on both sides of the main body. Do not stack this unit or use it in a horizontal position.

⚠ CAUTION

May cause injury or damage other equipment

- Do not use AC cables other than those supplied.
- Do not use the power cord set supplied with this product for any other equipment
- Use the approved power cord / appliance connector / plug conforming to the proper ratings (voltage, ampere) and safety regulations of each country if applicable.
- Keep the unit away from excessively dry hot or humid environments.
- Stop charging immediately if the charging does not complete within the designated time.
- In case of abnormal smell, leak, color change or case deformity during use, turn the power off and unplug the cable from the socket to avoid possible injury.
- Do not carry the charger while the battery is attached.
- Do not charge the battery while the battery is used with equipments.
- Do not charge the battery while the battery is charged from other charger.
- This is a class A product in a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Features

- IDX Lithium-ion batteries equipped with USB PD can be charged.
- Equipped with six USB-C ports:
 - C1 port supports up to 140W
 - C2 port supports up to 100W
 - C3 + C4 ports support a combined maximum of 100W
 - C5 + C6 ports support a combined maximum of 100WWhen all six ports are used simultaneously, the total output supports up to 440W compliant with the USB PD standard. The output voltage is automatically switched by connecting the battery. The maximum output when charging the battery depends on the USB PD input specifications on the battery side.
- An LCD display is located in the center of the front panel. It shows the voltage, current, power, and status of each port, as well as the total output power.

Operating Instructions

Charging procedure:

1. Insert the supplied AC power cord into the AC inlet on the rear panel of the unit, and plug the AC plug into a wall outlet.
2. Turn on the power switch on the rear panel. (The LCD on the front panel will light up.)
3. Connect the supplied USB Type-C cable to the USB-C port on an IDX battery equipped with USB PD, and connect the other end to the USB-C port on this unit. Charging will start automatically. Confirm that the battery's LED indicator lights up, indicating charging is in progress.

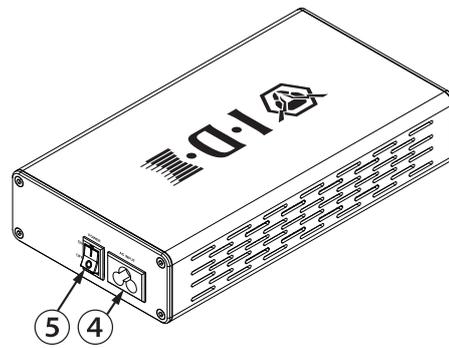
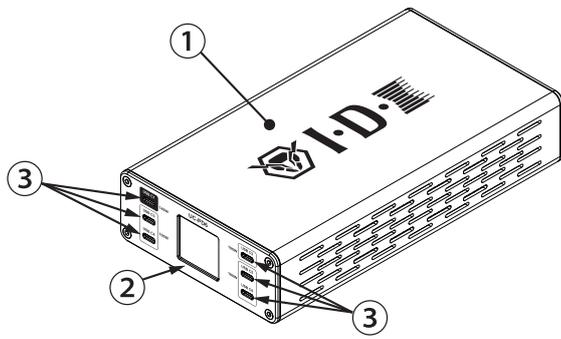
After Use:

4. When charging is complete, disconnect the USB Type-C cable from the unit.
5. Turn off the power switch on the rear panel. (The LCD will turn off.)
6. Disconnect the AC power cord from the unit and unplug the AC plug from the wall outlet.

Specifications

- Recommended batteries : IDX Lithium Ion batteries equipped with USB PD
- Input voltage : AC100V~240V 50 / 60Hz
- Output voltage :
 - USB C1 port : DC5V/3A, DC9V/3A, DC12V/3A, DC15V/3A, DC20V/5A, DC28V/5A, PPS 3.3V-21V/5A (Max140W)
 - USB C2 port : DC5V/3A, DC9V/3A, DC12V/3A, DC15V/3A, DC20V/5A, PPS 3.3V-21V/5A (Max100W)
 - USB C3 or C4 port : DC5V/3A, DC9V/3A, DC12V/3A, DC15V/3A, DC20V/5A, PPS 3.3V-21V/5A (Max100W)
2 port total : Max100W(*●See also "Operation of C3/C4 and C5/C6 Ports.")
 - USB C5 or C6 port : DC5V/3A, DC9V/3A, DC12V/3A, DC15V/3A, DC20V/5A, PPS 3.3V-21V/5A (Max100W)
2 port total : Max100W(*●See also "Operation of C3/C4 and C5/C6 Ports.")
- DC Connector : USB Type-C 6port
- Operating temperature : 0 ~ 40°C / 32 ~ 104°F
- Operating humidity : 20% ~ 80% RH
- Protection circuit : Over-voltage, Over-current, Short circuit, Over temperature
- Dimensions : approx. 119.9 (W) × 47.0 (H) × 224.7 (D) mm
approx. 4.720 (W) × 1.850 (H) × 8.846 (D) inches
The attached USB Type-C cable (28V/5A) 6 cables. length :
approx. 1.0m approx. 39.37inches
- Weight : approx. 1,200g / 2.645lbs
- Charge time standard : For the latest charging time information, please visit our website. (https://www.idx.tv/charge_time/)

Location and Function of Parts



- ① Main unit
- ② LCD display
- ③ USB-C connector ×6
- ④ AC inlet
- ⑤ Power switch

LCD Display

- The LCD shows the following information:

① Individual port indicators

② Output status of each port

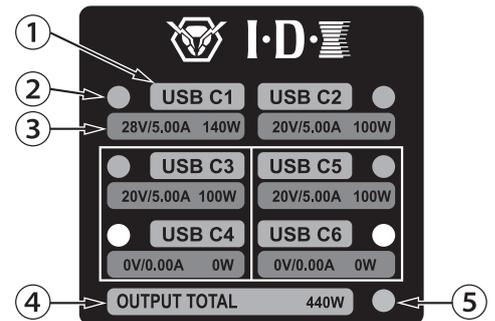
Red: Output 1W or higher / Green: Output below 1W / Orange (blinking): Standby mode

③ Output voltage / current / power for each port

④ Total output power (C1–C6)

⑤ Overall output power status (C1–C6)

- If the total output power remains at 0W for 10 minutes, the LCD will turn off automatically. It will turn on again when power output resumes.



⚠ Caution

- When using this product, the surface of the main body may become hot. This product is designed for indoor use. Use within the recommended room temperature. Expected to be hot when charging multiple IDX batteries with the USB-C port.
- This product is designed to draw in outside air through the air intake vent on the right side of the unit and to discharge heat through the air exhaust vent on the left side. When using the unit, ensure that there is at least 10 cm of open space around it to prevent the air intake and exhaust vents from being blocked.
- If the internal temperature of the unit becomes high during operation, the temperature protection function may automatically reduce the output power or temporarily shut down the output. The operation will resume automatically once the temperature returns to a safe level.
- Do not stack the units or place the unit on its side during use.
- This product meets the applicable safety standards. It can be used without problems even if the charger becomes hot.
- Charging with USB Power Delivery requires to connect the equipment which supports USB Power Delivery.
- The output voltage is switched automatically when connecting the battery.
- Depending on the condition of the connected battery it may not be charged with the maximum power, this is not a malfunction.
- Please use the USB Type-C cable included. It is compatible with the USB PD standard and can be charged up to 140W (Single charging).
- Please insert the USB-C connector firmly. Charging starts automatically once plugged in.
- Please check the charging status by pressing LED check button on the connected battery.
- Some devices may not be charged, depending on the specifications and performance of the device.

Compensation for recorded content

- Recorded content cannot be compensated for if recording or playback is disabled due to a malfunction of the battery pack or other devices.

Disposal

- This product is intended for professional use.
- When disposing of this product, do not treat it as household waste.
Dispose of it properly in accordance with local and national regulations, as industrial waste or electronic equipment subject to recycling.

Power Output Specifications for 6 Ports

| Status | No. | C1 | C2 | C3 | C4 | C5 | C6 |
|-----------|------|------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------|
| 1port use | 1 | 140W | / | / | / | / | / |
| | 2 | / | 100W | / | / | / | / |
| | 3 | / | / | 100W ^{*1} | / | / | / |
| | 4 | / | / | / | 100W ^{*1} | / | / |
| | 5 | / | / | / | / | 100W ^{*1} | / |
| | 6 | / | / | / | / | / | 100W ^{*1} |
| 2port use | 7 | 140W | 100W | / | / | / | / |
| | 8 | 140W | / | 100W | / | / | / |
| | 9 | 140W | / | / | 100W | / | / |
| | 10 | 140W | / | / | / | 100W | / |
| | 11 | 140W | / | / | / | / | 100W |
| | 12 | / | 100W | 100W | / | / | / |
| | 13 | / | 100W | / | 100W | / | / |
| | 14 | / | 100W | / | / | 100W | / |
| | 15 | / | 100W | / | / | / | 100W |
| | 16 | / | / | 50W/50W ^{*2} | | / | / |
| | 17 | / | / | 100W | / | 100W | / |
| 3port use | 18 | / | / | 100W | / | / | 100W |
| | 19 | / | / | / | 100W | 100W | / |
| | 20 | / | / | / | 100W | / | 100W |
| | 21 | / | / | / | / | 50W/50W ^{*2} | |
| | 22 | 140W | 100W | 100W | / | / | / |
| | 23 | 140W | 100W | / | 100W | / | / |
| | 24 | 140W | 100W | / | / | 100W | / |
| | 25 | 140W | 100W | / | / | / | 100W |
| | 26 | 140W | / | 50W/50W ^{*2} | | / | / |
| | 27 | 140W | / | 100W | / | 100W | / |
| | 28 | 140W | / | 100W | / | / | 100W |
| 4port use | 29 | 140W | / | / | 100W | 100W | / |
| | 30 | 140W | / | / | 100W | / | 100W |
| | 31 | / | 100W | 50W/50W ^{*2} | | / | / |
| | 32 | / | 100W | 100W | / | 100W | / |
| | 33 | / | 100W | 100W | / | / | 100W |
| | 34 | / | 100W | / | 100W | 100W | / |
| | 35 | / | 100W | / | 100W | / | 100W |
| | 36 | / | 100W | / | / | 50W/50W ^{*2} | |
| | 37 | / | / | 50W/50W ^{*2} | | 100W | / |
| | 38 | / | / | 50W/50W ^{*2} | | / | 100W |
| | 39 | / | / | 100W | / | 50W/50W ^{*2} | |
| 5port use | 40 | / | / | / | 100W | 50W/50W ^{*2} | |
| | 41 | 140W | 100W | 50W/50W ^{*2} | | / | / |
| | 42 | 140W | 100W | 100W | / | 100W | / |
| | 43 | 140W | 100W | 100W | / | / | 100W |
| | 44 | 140W | 100W | / | 100W | 100W | / |
| | 45 | 140W | 100W | / | 100W | / | 100W |
| | 46 | 140W | 100W | / | / | 50W/50W ^{*2} | |
| | 47 | / | 100W | 50W/50W ^{*2} | | 100W | / |
| | 48 | / | 100W | 50W/50W ^{*2} | | / | 100W |
| | 49 | / | 100W | 100W | / | 50W/50W ^{*2} | |
| | 50 | / | 100W | / | 100W | 50W/50W ^{*2} | |
| 6port use | 51 | / | / | 50W/50W ^{*2} | | 50W/50W ^{*2} | |
| | 52 | 140W | 100W | 50W/50W ^{*2} | | 100W | / |
| | 53 | 140W | 100W | 50W/50W ^{*2} | | / | 100W |
| | 54 | 140W | 100W | 100W | / | 50W/50W ^{*2} | |
| | 55 | 140W | 100W | / | 100W | 50W/50W ^{*2} | |
| | 56 | / | 100W | 50W/50W ^{*2} | | 50W/50W ^{*2} | |
| 57 | 140W | 100W | 50W/50W ^{*2} | | 50W/50W ^{*2} | | |

●Operation of C3/C4 and C5/C6 Ports

*1. When only one of the C3(C5) or C4(C6) ports is connected with a Type-C cable and an IDX USB PD-compatible lithium-ion battery, charging is available up to 100W maximum. (The other port must not have any cable or device connected.)

*2. After approximately 3 minutes of charging, the charger automatically adjusts power distribution based on the power demand of each connected device. If C3(C5) requires more than 30W, while C4(C6) uses less than 30W, the charger automatically reallocates more power to the higher-demand port (C3/C5). Conversely, if C4(C6) requires more than 30W and C3(C5) less than 30W, power priority is given to C4(C6).

To maintain stable charging, the charger also guarantees minimum power output for each port based on the required voltage of the connected battery :

When one port operates at 20V output (high-voltage fast charging), that port is guaranteed a minimum of 45W.

When one port operates at 9V, 12V, or 15V and consumes less than 15W, that port is still guaranteed a minimum of 15W.

Examples :

If C3(C5) is charging a 20V battery at 45W, the remaining 55W (100W – 45W) is available for C4(C6).

If C3(C5) is charging at 9V/12V/15V and using 15W, up to 85W (100W – 15W) is available for C4(C6).

This mechanism ensures stable charging across both ports according to each battery's voltage requirement.

When both connected batteries draw approximately 30W or less each, or both require 30W or more, the charger does not perform power redistribution.

In such cases, the initial allocation (up to 50W per port, 100W total) remains fixed.

Usage Tips

Thanks to the automatic power allocation feature, the charger intelligently prioritizes power to the device that requires higher output.

No manual operation is necessary — simply connect up to two devices, and the charger will automatically manage optimal power distribution for efficient and safe charging.



* Design and specifications are subject to change without notice.

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