

For your protection, please read this manual completely before operating the appliance, and keep this manual for future reference.

WARNING



CAUTION: To reduce the risk of electric shock, do not remove cover. Refer servicing to qualified service personnel. Disconnect the mains supply before connecting or disconnecting the links to the battery.



Read the Instruction Manual carefully before use. Use only with the compatible batteries listed in instruction manual.

Explanation of Graphical Symbols



This symbol is intended to alert the user to the presence of uninsulated "Dangerous voltage" within the equipment's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Please follow the instructions for a maximum safety; otherwise the battery can be damaged violently. And also it can cause a fire to injure a human body or to lose the property.

⚠ WARNING

- Do not immerse the battery in water or sea water, or get it wet. It causes the generating heat, smoke, rupture or flame.
- Do not use or leave battery nearby fire, stove or heated place. It causes the generating heat, smoke, rupture or flame.
- Do use the specified charger and observe charging requirement. If the battery is charged with unspecified condition (under high temperature over the regulated value, excessive high voltage or current over regulated value, or remodeled charger), it causes the generating heat, smoke, rupture or flame.
- Do not incinerate, make the direct soldering on or heat the battery. It causes the generating heat, smoke, rupture or flame.
- Do not throw the battery, drive a nail, strike it by hammer, tread or give it impact. It causes the generating heat, smoke, rupture or flame.
- Do not disassemble or reconstruct battery. It causes the generating heat, smoke, rupture or flame.
- Do not charge battery nearby the fire or under the blazing sun. It causes the generating heat, smoke, rupture or flame.

⚠ CAUTION

- Do not use an abnormal battery. In case the battery has bad smell or is generated its changing color or deformation or causes something wrong in using (includes charging and storage), let it take out from equipment or charger and do not use it. If an abnormal battery is used, it will generate heat, smoke, rupture or flame.
- Do not continue to charge battery over specified time. If the battery is not finished charging over regulated time, let it stop charging. There is possibility that the battery might generate heat, smoke, rupture or flame.
- Do not use a leaked battery nearby fire. If the liquid leaks from the battery (or the battery gives out bad smell), let the battery leave from flammable objects immediately. It causes the generating heat, smoke, rupture or flame.

⚠ ATTENTION

- Please read the manual before using the battery and let it keeps after reading. And also, please reread if necessary.
- Please read the manual of specified charger about charging method.
- If the skin or cloth is smeared with liquid from the battery, wash with fresh water. It may cause the skin inflammation.

SSP-50

Semi-Solid battery Power station



Instruction Manual

PD

Thank you for purchasing the SSP-50 Semi-Solid battery Power station. Before using this product, please read this manual carefully and make sure you fully understand the basic operating procedures and safety precautions to ensure safe and proper use. After reading, be sure to keep this manual in a convenient place so that it can be referred to at any time. If you have any additional questions, please contact your local IDX office listed at the end of this manual.

* :Recharge immediately after purchase.



GUARDIAN
mini

Caution for safety use

Improper handling of this Li-ion battery may result in smoke, heat, fire, explosion or leakage as well as cause performance degradation or failure. Please be sure to observe the following precautions.

DANGER : May cause sudden serious injury and death.

- Charge with IDX battery PD charger only.
- Do not short the contact pins with any metal object. Do not carry or store with metal equipment.
- Do not expose to heat and never throw the battery in a fire.
- Do not immerse in water. Keep the battery dry and away from excessively dry or humid environments.
- Do not leave the battery exposed to excessive heat such as in a car or directly under the sun light. Do not use outside of specified temperature ranges.
- Do not solder on the contact pins directly. Do not attempt to open the outer casing or break apart the battery.
- Do not subject the unit to extreme physical impact or pressure, or place any object across the terminals that could cause it to short.
- Do not pierce or drill into the outer casing of the unit. Do not attempt to use the battery if damaged.
- Do not use the battery in a corrosive environment. Damages occur from salt water, seawater, acid, alkali, corrosive gas, etc.
- Protect the Type-C cable from any damage. Do not use the cable if it is damaged or if the connector is deformed.

WARNING : May cause serious injury and death.

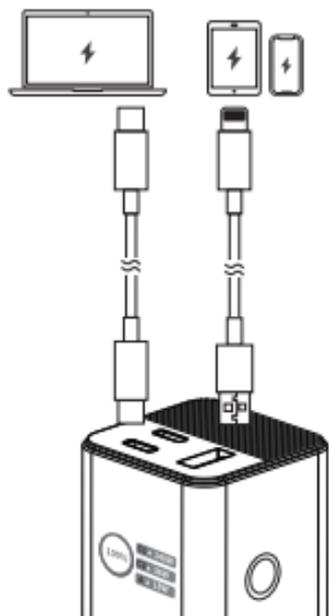
- Please note that the outer casing may become hot when the battery is charged or discharged at high temperatures or under heavy load.
- Stop charging immediately if the battery fails to charge within the designated time.
- Do not use if the battery displays unusual characteristics (odd odor, discoloration, etc.) when in use, during charge or in storage.
- Keep away from fire if the battery leaks fluid or has an unusual smell.
- If leaked fluid comes into contact with your skin, immediately wash the affected area thoroughly with soap and plenty of water.
- If leaked fluid gets into your eyes, do not rub them. Immediately rinse your eyes with clean running water for at least 15 minutes, and seek medical attention.

CAUTION : May cause injury or damage other equipment.

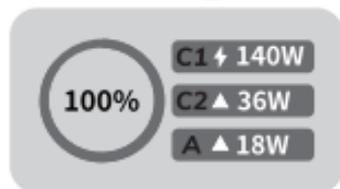
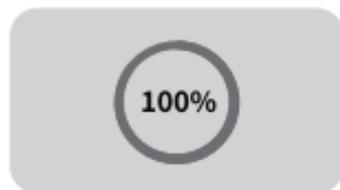
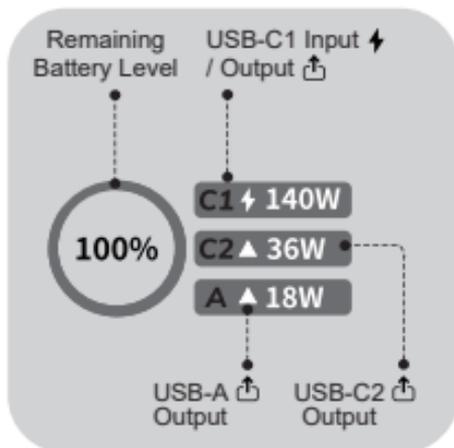
- Be sure to follow the charging/discharging conditions specified by our company.
- Store in cool and dry conditions.
- During long periods of inactivity, please remove the battery from the equipment.
- Do not use, store or place the battery in an electrostatic area.
- Always keep the connectors clean. If dirt or foreign matter adheres to them, wipe it off with a dry cloth.

How to Use

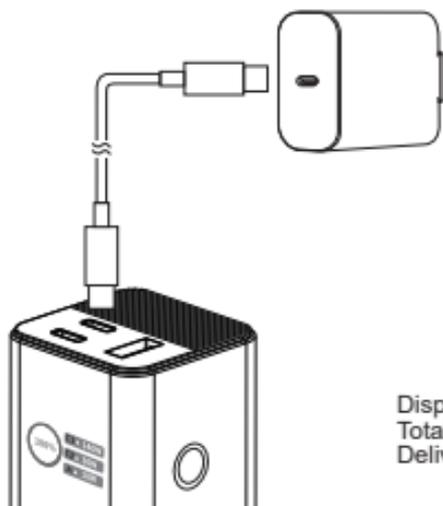
Supplying Power to Devices



Display and Operation



Charging the SSP-50

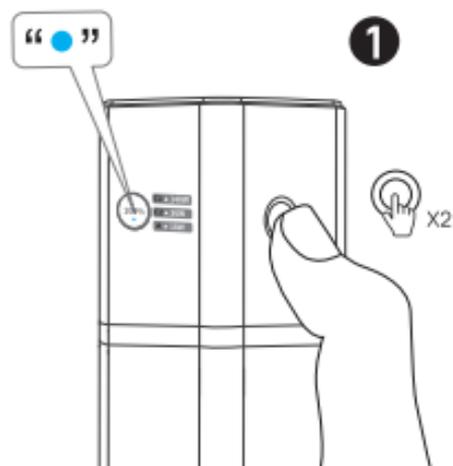


Displays the
Total Energy
Delivered

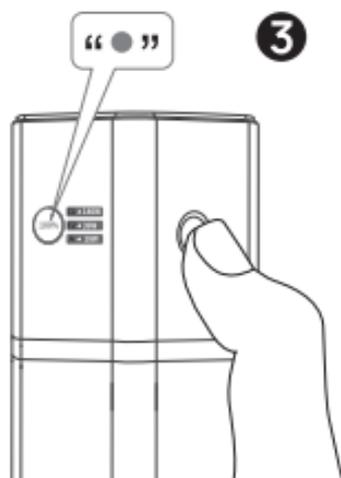
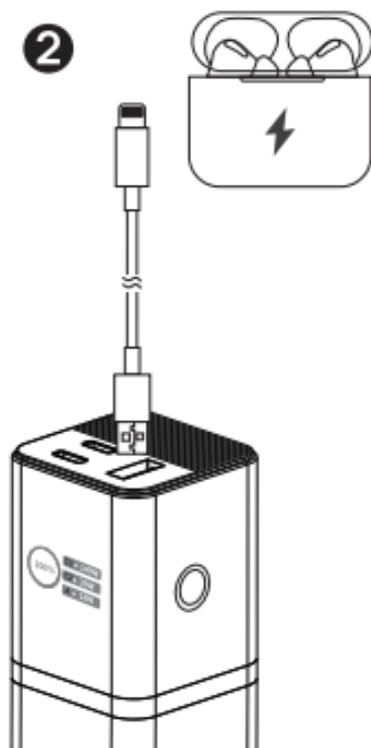
TEMPERATURE
-00 °C / -000 °F
POWER
0000Wh

Low-current Mode

Use Low-Current Mode for devices that do not require a large current.



Quickly press the button twice to switch to Low-Current Mode.



Quickly press the button twice again to return to Normal Mode.

Powering Devices

- Since the maximum discharge power for each of the USB-A, USB-C1, and USB-C2 ports is specified individually, be sure to use this product with devices whose power consumption is within the specified limits. When connecting devices with high power consumption, the internal temperature may rise, causing the temperature protection function to activate. This may result in a reduction of the output power or a temporary shutdown of the power supply. In addition, if the product is used beyond the maximum discharge power, the safety protection circuit may activate and stop the power output.
- In low-temperature environments, battery discharge performance is significantly reduced. As a result, the unit may fail to power on or the operating time may be shortened.
- In high-temperature environments, battery life may be shortened. Operation within a temperature range of 50~86°F(10°~30°C) is recommended.
- When using radio transceivers or similar devices, keep them away from the battery. Radio interference may cause the power supply to stop.
- Be sure to disconnect connected devices after use. If devices with high standby power consumption remain connected, the remaining battery capacity may decrease and the over-discharge protection may activate.

Charging

- Be sure to charge this battery only with IDX lithium-ion PD charger. Do not use chargers manufactured by other companies. For charging procedures, refer to the instruction manual supplied with each charger.
- When charging with PD 140W, the battery can be fully charged to 100% in approximately 19 minutes. However, depending on the ambient temperature, the charging temperature protection may activate and temporarily prevent charging.
- Charge the battery within the specified operating temperature range. Charging outside the specified range may cause cell deterioration. For optimal battery performance, charging at a temperature of 50~86°F(10~30°C) is recommended.
- Due to self-discharge, please charge the battery before use.

CAUTION

- To ensure safety, this battery is equipped with a protection circuit. If the internal temperature of the battery is too low or too high, the protection circuit may activate and charging may not be possible.
- It is normal for the internal temperature to rise during use. However, if charging is started immediately after use, the protection circuit may activate due to high internal temperature and charging may not be accepted temporarily. This is not a malfunction of the battery or the PD charger. Charging will automatically resume once the internal temperature decreases. In low-temperature conditions, allow the battery to acclimate to room temperature before charging again.
- This product supports power supply and charging via USB PD. Depending on the ambient temperature and the ratings of the connected device, the surface of the unit may become hot. Handle the product with care.

Protection circuitry

- This battery is equipped with overcharge protection, over-discharge protection, overcurrent protection, and temperature protection to ensure safe operation.
- If the internal temperature becomes too high during power output or charging, the battery may temporarily stop supplying power or charging. Power output or charging will automatically resume once the temperature decreases.
- When the battery capacity reaches 0%, the over-discharge protection will activate and stop power output. In this case, charge the battery promptly. If the battery is left uncharged for an extended period, it may become unusable.

CAUTION

- This product complies with applicable safety standards and can be used safely even if the unit becomes warm. However, since a temperature protection function is built in, the protection circuit may activate depending on temperature conditions.

Life cycle

- As the frequency of use increases, the operating time after a full charge will gradually become shorter. When this occurs, it indicates that the battery is approaching the end of its service life.
- The timing of battery end-of-life varies depending on frequency of use, operating conditions, and storage conditions.
- The following conditions may shorten battery life:
 - Frequent use
 - Use under high load
 - Use or storage in high-temperature environments
 - Long-term storage while fully charged
- Even with a low number of usage cycles, frequent over-discharge or extended periods of over-discharge may accelerate battery degradation and shorten its service life.

Storage

- Store the product in a cool, dry place.
- Battery degradation accelerates as the ambient temperature increases and the storage period becomes longer. For long-term storage of one month or more, storage at a temperature between 32°F~68°F (0°C~20°C) is recommended.
- Do not store or leave the product in locations where the temperature may exceed 122°F(50°C).
- For long-term storage, periodically (approximately once every three months) check the charge level using the display, and maintain the battery charge at approximately 30%. Leaving or storing the battery in a fully charged state for an extended period may accelerate battery degradation.

USB-A

- The USB-A port supports QC (Quick Charge) and other standards, and can supply up to 18W of power. When used simultaneously with USB-C1 or USB-C2, be sure to operate within the maximum total discharge power.
- The output voltage and current available from the USB-A port are as follows:
USB-A: 5V/3A, 9V/2A, 12V/1.5A(18W Max)
- Use an A-Type cable when connecting to the USB-A port.
- The USB-A data lines are not supported.
- The USB-A port is output-only. Charging the battery is not available.
- No output is provided while the unit is shut down. Press the POWER button before use.

USB-C

- The USB-C ports support USB PD (Power Delivery).
USB-C1 supports power output and charging up to 140W.
When used simultaneously with USB-C2 or USB-A, be sure to operate within the maximum total discharge power.
- For USB-C connections, use the supplied Type-C PD-compatible cable or a cable rated for 28V / 5A.
- When supplying power via USB PD, connecting the cable to the target device automatically activates USB output mode, and the battery automatically selects the appropriate voltage and current supported by the connected device.
- The output voltage and current available for USB PD power supply are as follows:
USB-C1: 5V/3A, 9V/3A, 15V/3A, 20V/5A, 28V/5A (140W Max)
USB-C2: 5V/3A, 9V/3A, 12V/3A(36W Max)
- When charging the battery using a USB PD charger, the supported charging voltage and current are as follows:
USB-C1: 5V/3A, 9V/3A, 15V/3A, 20V/5A, 28V/5A (140W Max)
- When two of these batteries are connected together, charging will start automatically. However, it is not possible to select which battery will be charged.
Likewise, when connecting USB PD-compatible mobile batteries or notebook computers, the charging direction cannot be reliably controlled.
For charging, the use of a USB PD charger is strongly recommended.
- When USB-C or USB-A cables are disconnected, the unit automatically turns off.
- If the internal temperature becomes too high during PD charging, PD charging will be interrupted to prevent hazards.
PD charging will resume automatically once the internal temperature decreases.
* High-power PD charging (such as 140W) is more likely to increase internal temperature, making this protection function more likely to activate.
- No power is supplied while the unit is shut down.
Press the POWER button before use.

Battery recycle

This Li-ion battery can be recycled. Please follow the regulations in your country or contact your local IDX office for further details.

Li-ion Battery Air transport Compliance

The Air transport regulations for the lithium-ion batteries will be revised regularly, so please check our website before transporting the battery.
(<http://idxtek.com/lithium-ion-transportation/>)

Notice Regarding Air Travel in China

This product has not obtained China Compulsory Certification (CCC) and does not display a CCC mark. When traveling on domestic flights within China, airport security inspections may require confirmation of the CCC mark. Depending on inspection results and local regulations, the product may be refused for carry-on or checked baggage, or may be confiscated. Please contact your airline and the relevant airport authorities in advance for confirmation before boarding.

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.

Warranty / After-Sales Service / Disclaimer

Warranty

- The warranty period is 1 year from the date of purchase. To receive warranty service, you must present a receipt or invoice that shows the purchase date. Please keep it in a safe place.
- As this product is a power bank, we do not provide repair service. If, within the warranty period, a defect covered by the warranty is confirmed at our discretion, we will provide a product replacement.
- Even within the warranty period, replacement may be provided at the customer's expense if the issue falls under any of the non-warranty conditions described below.
- Since the battery is a consumable item, its capacity will gradually decrease with use and the operating time (available power supply time) will become shorter. Reduction in battery capacity is not covered by the warranty.

After-Sales Service

- Product specifications are subject to change without notice. We do not accept requests for specification changes, modifications, or feature additions.
- In the event of replacement, the product may be replaced with an equivalent product depending on stock availability.
- If you have any questions or need assistance with replacement service, please contact the retailer where you purchased the product. If you cannot contact the retailer, please contact our service desk.

When Requesting Replacement Service

- When requesting replacement service, please provide the following information:
 - Date of purchase (please prepare your receipt or invoice)
 - Product model name and serial number (shown on the nameplate label on the bottom of the unit)
- Description of the problem (please describe as clearly as possible)

Notes

- * Shipping costs may be charged to the customer regardless of whether the product is within the warranty period.
- * Please package the product securely so that it can withstand impact during transportation.
- * For damage or loss during transportation, handling will be in accordance with the shipping carrier's terms and compensation. We may not be able to assume responsibility in such cases.

Disclaimer (Main Cases Not Covered by Warranty)

Even within the warranty period, if any of the following conditions apply, the issue will not be covered by the warranty and replacement service may be provided at the customer's expense. Depending on the condition of the product, we may also be unable to provide service.

- 1.If proof of purchase or product identification cannot be confirmed
 - (1)If the purchase date (and/or place of purchase) cannot be confirmed from a receipt / invoice, etc.
 - (2)If the serial number shown on the product label cannot be confirmed
- 2.Failure or damage caused by use or handling
 - (1)Opening the enclosure, disassembly, modification, or attempted repair of the product
 - (2)Use that does not comply with this manual or failure to follow precautions
 - (3)Failure due to mishandling such as dropping, tipping over, impact, submersion or water ingress, or intrusion of sand/foreign matter/chemicals
 - (4)Use under power conditions (voltage, frequency, etc.) not specified in this manual
 - (5)Cosmetic or performance changes due to aging or normal use (discoloration, rust, scratches, noise, vibration, etc.)
- 3.Failure or damage due to external causes
 - (1)Natural disasters such as earthquakes, storms and floods, tsunamis, lightning, volcanic eruptions; fire; pollution; external accidents; or other force majeure events
 - (2)Damage caused by a device connected to this product
 - (3)Causes related to animals such as insects, birds, rats, etc.
- 4.Scope of liability

We are not responsible, to the extent permitted by applicable law, for indirect damages arising from failure or damage of this product, including failure of connected devices, data loss, loss of profits, or business losses.

Specifications

	SSP-50
Cell chemistry	Semi-Solid Li-ion
Cell capacity	2000mAh
Cell nominal voltage	3.7V
Total cell capacity	12000mAh(2000mAh×6cells)
Total pack capacity	22.2V / 2000mAh / 44.4Wh
Rated Capacity	7700mAh(USB 5V / conversion efficiency 87.5%)
USB-C1 PD Input / Output	5V/3A, 9V/3A, 15V/3A, 20V/5A, 28V/5A (140W Max)
USB-C2 PD Output	5V/3A, 9V/3A, 12V/3A(36W Max)
USB-A QC Output	Normal mode:5V/3A, 9V/2A, 12V/1.5A(18W Max) Low current mode:5V/1A(5W Max)
USB-C2 + USB-A Output	5V/3A(15W Max)
USB-C1 + C2 Output	176W Max
USB-C1 + C2 + A Output	155W Max
Protection function	Over-charge/discharge/current,Thermal protection
Ambient temperature	Charge:32~113°F(0~45°C)(Rec:50~86°F(10~30°C))
	Discharge:14~140°F(-10~60°C)(Rec:50~86°F(10~30°C))
	Storage:14~104°F(-10~40°C)(less than 1 month)
Dimension(Inches/mm)	Approx. 1.693 × 5.433 × 1.693 / 43 × 138 × 43
Weight(lbs/g)	Approx. 0.926 / 420
Package Contents	SSP-50 unit, USB Type-C cable(supports up to 140 W), Carrying bag, Safety & Instruction Manual



* Design and specifications are subject to change without notice.

* USB Type-C[®] and USB-C[®] are trademarks or registered trademark of USB Implementers Forum companies.

Manufacturer : IDX Company, Ltd. 6-28-11 Shukugawa, Tama-ku, Kawasaki-shi, Kanagawa-ken, 214-0021 Japan

Tel : +81-44-850-8801 Fax : +81-44-850-8838 URL : <http://www.idx.tv/> E-mail : idx.japan@idx.tv

Importer for UK : IDX Technology Europe, Ltd. 933 Yeovil Road, Slough Trading Estate, Slough, Berkshire, SL1 4NH, England

Tel : +44-1753-547692 Fax : +44-1753-546860 URL : <http://www.idx-europe.co.uk/> E-mail : idx.europe@idx.tv

Importer for EU : IDX Technology Europe, Ltd. [German Branch] Johanneshohe 19 Kottbuserring 62288, Germany

Tel : +49-171-8632-661 URL : <http://www.idx-europe.co.uk/> E-mail : idx.germany@idx.tv

Importer for USA : IDX System Technology, Inc. 2377 Crenshaw Blvd, Suite 154, Torrance CA 90501 USA

Tel : +1-310-328-2850 Fax : +1-310-328-8202 URL : <http://www.idxtek.com/> E-mail : idx.usa@idx.tv

English R1