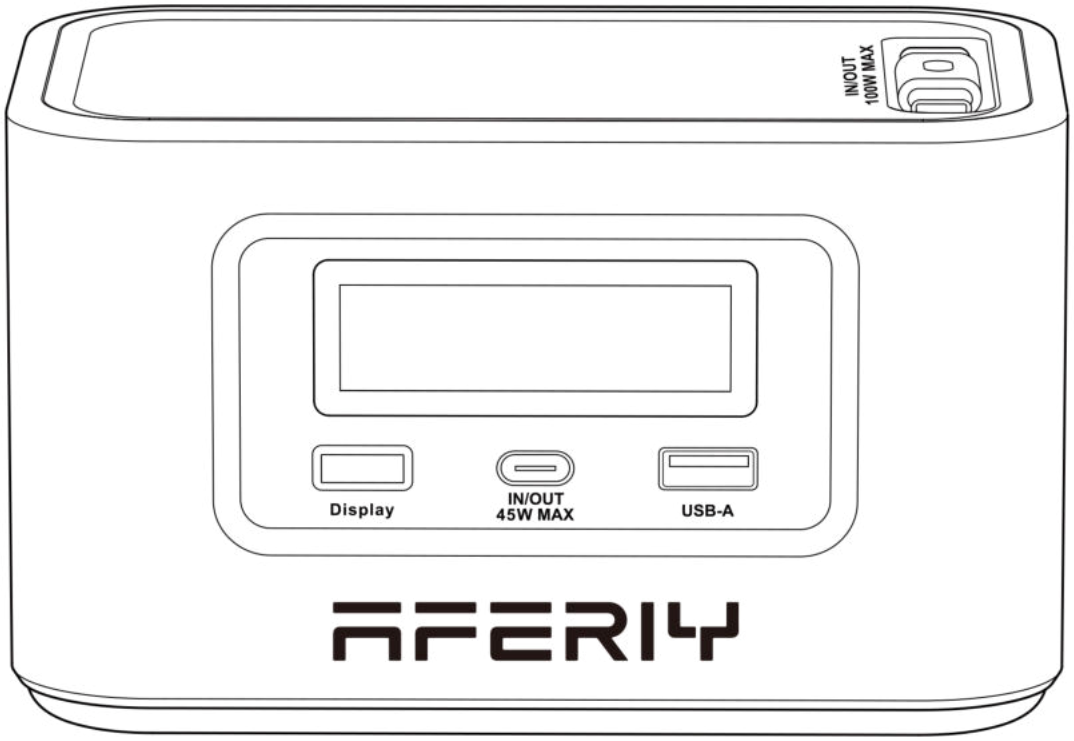
DC Portable Power Station

AF-PB010 | User Manual

Nano100



Hi dear,thank you very much for purchasing and experiencing the AF-PB010 DC portable power station. Before operating this product, please carefully read the user manual for proper operation.

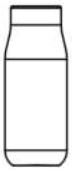
Contents

- Packging List ---- 01
- Appearance ---- 01
- Display Interface ---- 01
- Fault Code Display ---- 02
- Product Usage ---- 02
- Mains Charging ---- 02
- AF-SL030 mini Solar Panel Charging ---- 03
- Solar Panel Charging with MC4 Interface ---- 03
- Car Charger Charging ---- 04
- Charging Precautions ---- 04
- Technical Parameters ---- 05
- Safety Precautions ---- 06

Packing List



Product

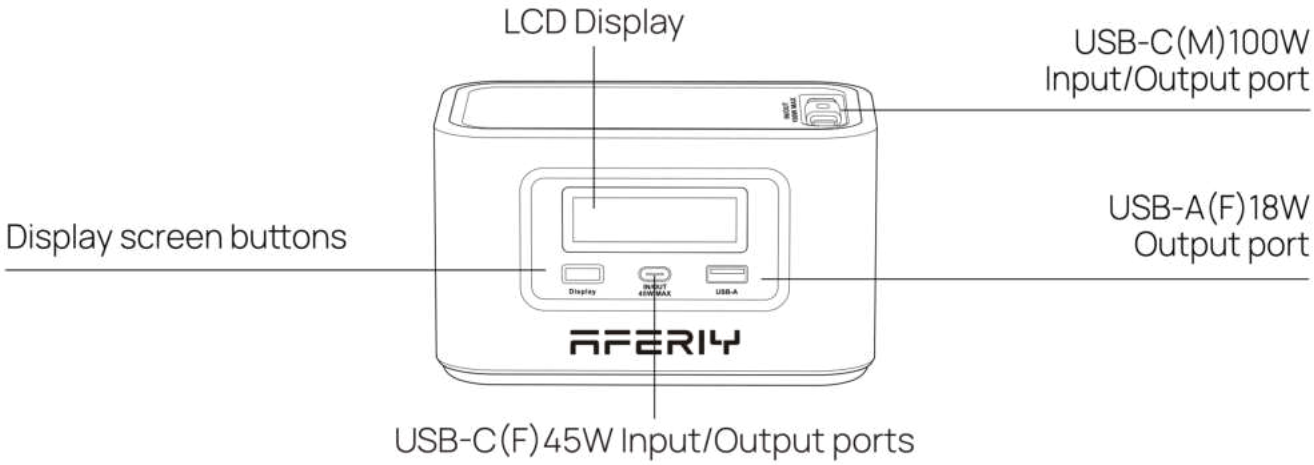


USB-C female to DC7909 female Adapter



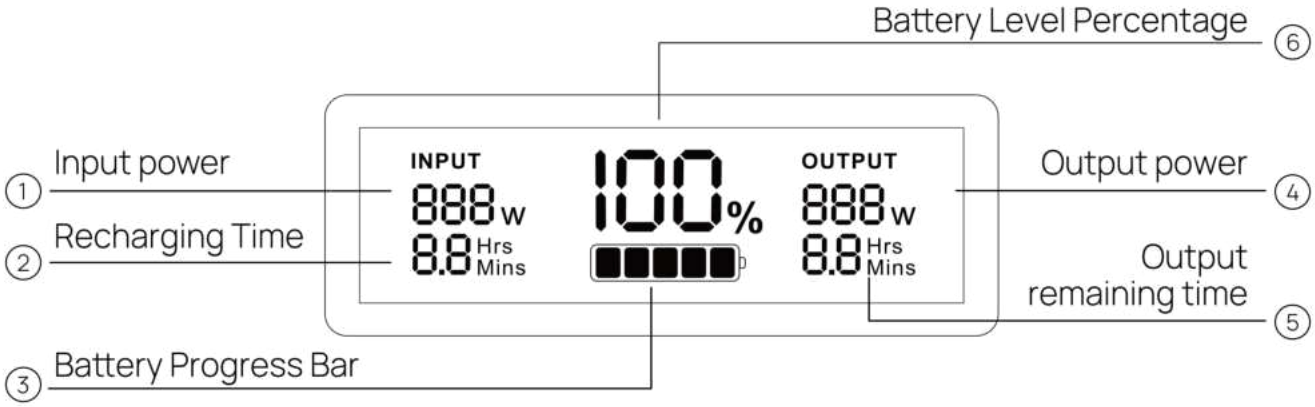
User Manual

Appearance



Display button	Controls the opening and closing of the display;
	If there is no operation, the display will automatically turn off after 3 mins.

Display Interface



Fault Code Display	
H0	H0: High temperature protection. If "H0" appears in the upper right corner of the display, please don't worry. It can be restored by itself after battery cooling down.
C0	C0: Low temperature protection. If "C0" appears in the upper right corner of the display, please don't worry. It can be restored by itself after the ambient temperature is back to normal.
E01 E02 E03 E04 E05	For quick troubleshooting, we have set the fault codes "E01, E02, E03, E04, E05" in the system. If these five fault codes appear in the upper right corner of the display, please immediately remove the load or unplug the charging plug, and leave the product unused for 10s, so that the product can recover by itself; if the solution fails, please contact the after-sales personnel.

Product Usage

The "Display" button can control the ON/OFF of the display. If the product is not charged or connected to other loads, the display will automatically turn off after 3 mins.

The product can be charged directly (according to the charging method) or connected to a load for discharge, without pressing the "Display" button.

Mains Charging

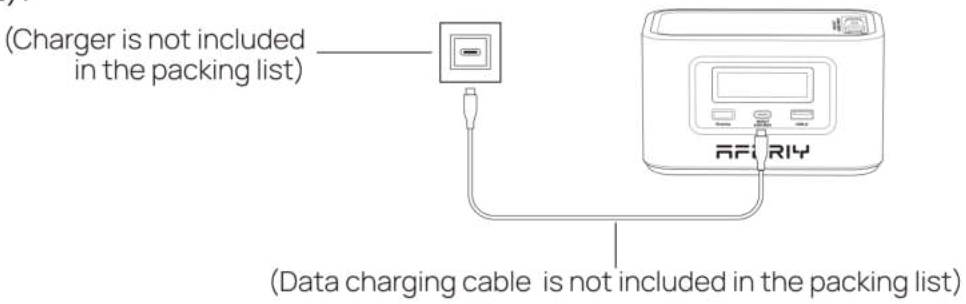
• Method 1

Plug the charger into the mains power, and the product can be directly charged through the port of the accompanying retractable cable USB-C (M). The max. charging power can reach PD100W (the charging power is related to the charger and product electric quantity).



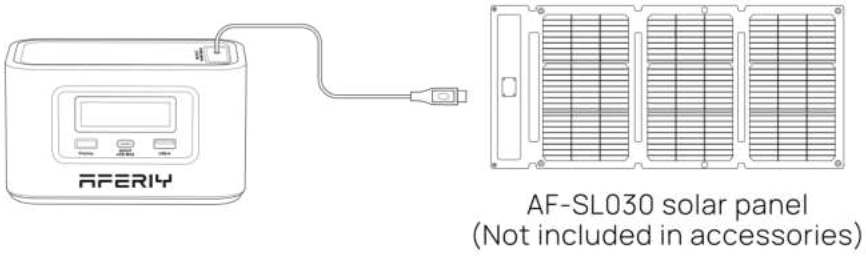
- **Method 2**

Plug the charger into the mains power, and the product can be directly charged through connecting the data charging cable (not included in the packing list) to the USB-C (F) port. The max. charging power can reach PD45W (the charging power is related to the charger, data charging cable and the electric quantity of the product).



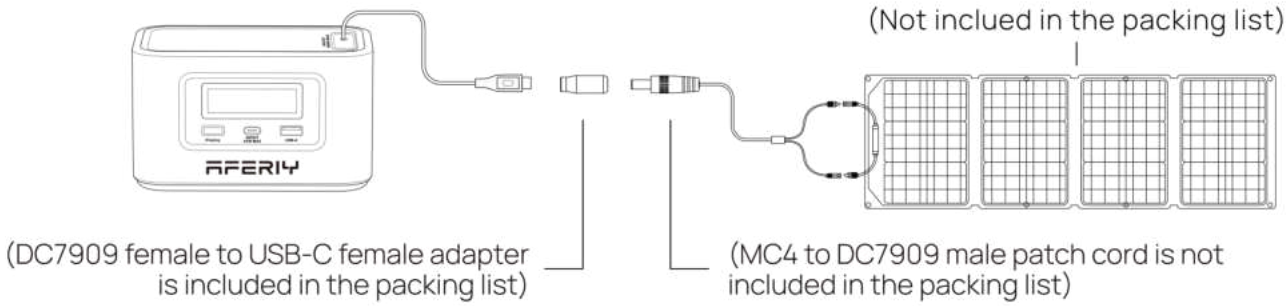
AF-SL030 mini Solar Panel Charging

Users who have purchased AFERIY AF-SL030 solar panel (30W max) can directly plug the USB-C (M) port of the accompanying retractable cable into the USB-C port of the AF-SL030 solar panel for charging.The maximum output power of the USB-C port of AF-SL030 is PD18W.



Solar Panel Charging with MC4 Interface

Users who have purchased solar panels with MC4 interfaces (voltage range 12V ~ 26V) need to separately purchase a MC4 to DC7909 male adapter cable by themselves, and use a DC7909 female to USB-C female adapter to connect the USB-C (M) port of the accompanying retractable cable for charging. The max. charging power can reach 100W (the charging power is related to the specifications of the solar panel, lighting conditions and product electric quantity).



Car Charger Charging

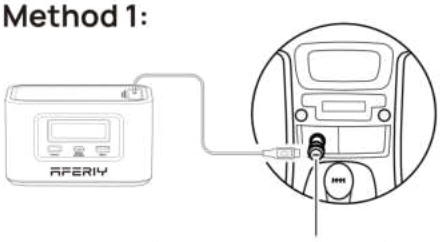
• Method 1

Once the car ignition system works, charging can be realized by connecting the USB-C (M) port of the accompanying retractable cable to the car charger (not included in the packing list). The max. charging power can reach 100W (the charging power is related to the power of the car charger and the product electric quantity).

• Method 2

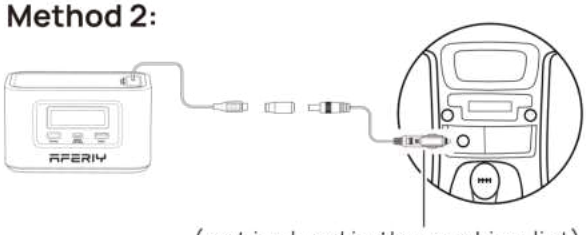
In addition to pairing with a car charger, it can also be used a cigarette lighter to DC7909 male adapter cable by themselves, and use a DC7909 female to USB-C female adapter to connect the USB-C (M) port of the accompanying retractable cable for charging. The max. charging power can reach 60W (the charging power is related product electric quantity).

Method 1:



(Car charger is not inclued in the packing list)

Method 2:



(not inclued in the packing list)

This product can only be charged through a 12V car charger port. Please start charging only after the car ignition, so as to avoid ignition failure due to car battery power loss. Meanwhile, pay attention to ensure that the car charger port and the car charger are in good contact, and that the cigarette lighter is fully inserted in place. Nor charging via the car charger in the case of driving on bumpy roads, so as to prevent poor contact that causes the contact point to burn out.

Charging Precautions

- The solar charging or car charging can only be realized through the USB-C (M) 100W port, instead of the USB-C (F) 45W port.
- The solar charging only supports 12V ~ 26V; otherwise, excessive voltage will impact on and damage the product.
- The car charger only supports 12V models and is not intended for 24V models, which will damage to this product.
- This product is not intended for simultaneous charging of USB-C (M) and USB-C (F).
- The design of USB-A(F) and USB-C(F) shares the same circuit, and they cannot charge and discharge simultaneously.

Technical Parameters

Product Name	Nano100
Model	AF-PB010
Battery pack capacity	99.2Wh(31000mAh 3.2V)
Cell type	LiFePO4
Rated capacity	20V⎓5A, 4400mAh
Cycle life	2000time（80%+）
Charging temperature	0℃~40℃
Discharge temperature	-10℃~40℃
Dimensions	145×87×88mm
Weight	1.1KG

USB-C(F) (PD Input)	5V⎓3A/9V⎓3A/12V⎓3A/15V⎓3A/20V⎓2.25A(45Wmax)
USB-C(M) (PD Input)	5V⎓3A/9V⎓3A/12V⎓3A/15V⎓3A/20V⎓5A(100Wmax)
USB-C(M) (Solar Input)	12V-26V⎓5A(100Wmax)
USB-C(M) (Car Input)	12V⎓5A(60Wmax)

USB-A(F) Output	5V⎓3A/9V⎓2A/12V⎓1.5A(18Wmax)
USB-C(F) Output	5V⎓3A/9V⎓3A/12V⎓3A/15V⎓3A/20V⎓2.25A(45Wmax)
USB-C(M) Output	5V⎓3A/9V⎓3A/12V⎓3A/15V⎓3A/20V⎓5A(100Wmax)
Total Output	USB-A(F)+USB-C(F):15Wmax USB-A(F)+USB-C(M):118Wmax USB-C(F)+USB-C(M):145Wmax USB-A(F)+USB-C(F)+USB-C(M):115Wmax

Safety Precautions

When using this product, basic precautions should always be followed, including the following:

1. Please fully charge this product for first use.
2. Store this product in a cool and dry place, do not store this product in high temperature or humidity. The operating temperature shall be 0 ℃ ~ 40 ℃ (32 ℉ ~ 104 ℉).
3. Please use a safety-certified charger to charge this product; otherwise, it may cause fire hazards or personal injury.
4. This product may heat up while charging, which is normal and needs no worry.
5. When this product is idled, please disconnect the power plug from the socket.
6. Do not disassemble this product. In the case of maintenance, seek for a qualified repairman. Improper reassembly may cause fire hazards or personal injury.
7. Do not expose this product to rain or snow, nor allow water intrusion. It is forbidden to use the product after immersion in water.
8. Do not use damaged or modified battery packs, which may bring about unpredictable results, such as fire hazards, explosion, or risk of injury.
9. Do not expose this product pack to fire or heat. Exposure to fire or temperatures above 100 °C may cause an explosion.
10. No use or place in high temperatures (such as in sun hot or burning-hot cars); otherwise, it may cause overheat of the internal battery, fire hazards or functional failure, and shortened service life, and etc.
11. The battery may explode at extremely low air pressure.
12. It is forbidden to use damaged wires or plugs, or damaged charging cables for output, as there is a risk of electric shock.
13. If this product is idled for a long time (3 ~ 6 months) after battery depletion, its performance will decline and even to the extent of inability to be charged.
14. If the product is to be idled for a long time, be sure to charge and discharge it every 3 months and keep the final electric quantity at about 60% to 80%.
15. Do not use harmful chemicals or detergents to clean this product.
16. Improper use, falling off or excessive force may cause damage to this product.
17. Pay close attention when children is close to the product in use, so as to reduce the risk of personal injury.

If you have any questions, please feel free to contact us.
Email address: support@aferiy.com.
Sincerely.