Anker SOLIX F3800 Solution

User Guide

(Ver. 10122024)

Table of Contents

1. Overview

Anker SOLIX F3800 is a portable power station that can be used with Anker SOLIX Home Power Panel for home energy cycling or with the transfer switch for emergency backup power.

Scenarios	Portable Power Station	Smart Home Power Kit	Home Backup Kit
Main Equipment	 · F3800	 · F3800 · Home Power Panel · Subpanel	 · F3800 · Transfer Switch
Function	· Portable Power Station · Multiple Output Ports · Powering Devices During Outages or Outdoors	· Smartly integrate F3800, the utility grid, and your rooftop solar system for maximum power efficiency and seamless backup. · Deliver backup power to essential home appliances during outages. · Easily control and monitor energy usage with the Anker app. · Avoid peak rate charges and optimize energy consumption.	During an outage, F3800 provides emergency power to home loads via Transfer Switch.

2. F3800 Portable Power Station

2.1 Product Overview

2.1.1 Overview

Portable power supply with multiple ports for powering devices during power outages or outdoors.

- Designed with plug-and-play home backup capability.
- 6,000W, 120V/240V split-phase output in one unit for power-hungry appliances.
- 3.84kWh - 26.9kWh expandable capacity with up to 6 expansion batteries (Anker SOLIX BP3800).
- Scalability up to 12kW (53.8kWh) for extended power outages.
- 2,400W solar input, allowing for a charge of 0 to 80% in just 1.5 hours by sunlight.
- Equipped with NEMA 14-50 and L14-30 sockets to directly charge your EV and RV.
- Monitor energy intelligently via the app. Connect with Bluetooth and Wi-Fi.

2.1.2 Component list

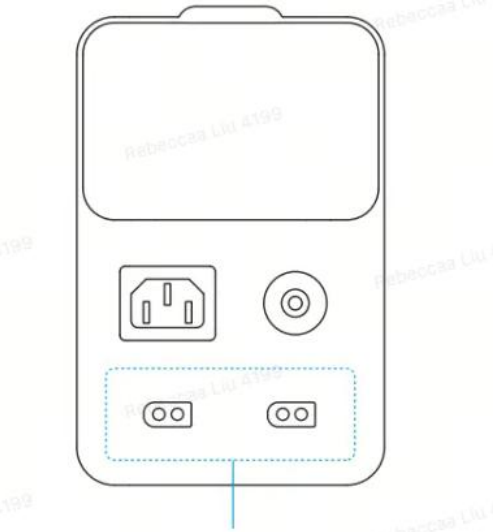
Product Name	Appearance	Functions
Anker SOLIX F3800 Portable Power Station		A 3840Wh, 6000W portable power station with multiple ports for powering devices during outages or outdoors. F3800 needs to be charged before its first use to activate it.
Anker SOLIX BP3800 Expansion Battery		Expansion Battery 3840Wh One F3800 can connect up to 6 expansion batteries, expandable to 26.9kWh. Two F3800 units can expand to 53.8kWh.
Anker SOLIX Double Power Hub		Connecting two Anker SOLIX F3800 units increases the maximum output from 6,000W~25A to 12,000W~50A.

2.1.3 Environmental Requirements

- Environmental Requirements
  - Do not expose the equipment to flammable or explosive gases or smoke. Do not operate the equipment in such environments.
  - Do not store flammable or explosive materials near the equipment.
  - Install the equipment in a well-ventilated area away from liquids.
  - Take precautions when installing in areas prone to natural disasters (e.g., floods, mudslides, earthquakes, hurricanes).
  - Avoid exposing the product to rain or using it in humid environments.
- Storage and Operating Temperature Range:
  - Equipment operating temperature: -4°F to 104°F / -20°C to 40°C.
  - Battery charging temperature: 32°F to 104°F / 0°C to 40°C.
  - Battery discharging temperature: -4°F to 104°F / -20°C to 40°C.

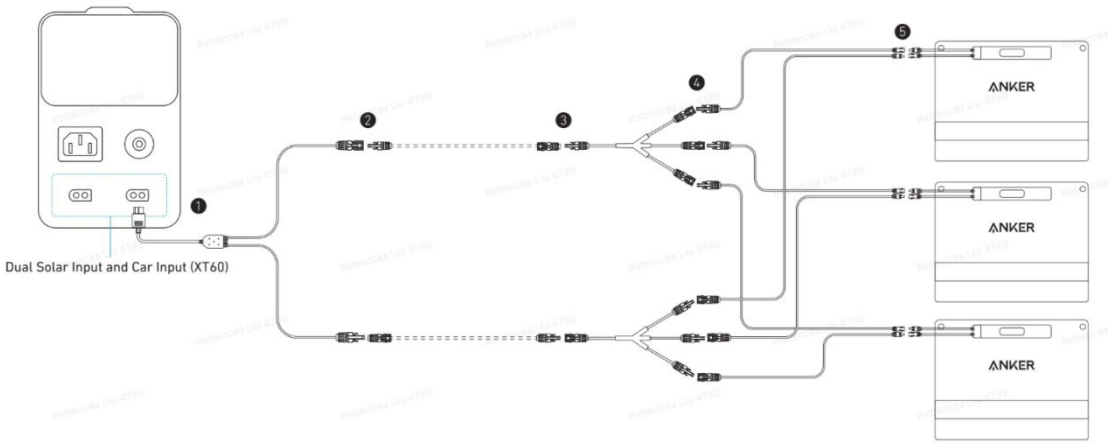
  To prolong battery life, we recommend to use or store the product at temperatures between 68°F and 86°F / 20°C and 30°C.

2.2 Solar Panel Connection

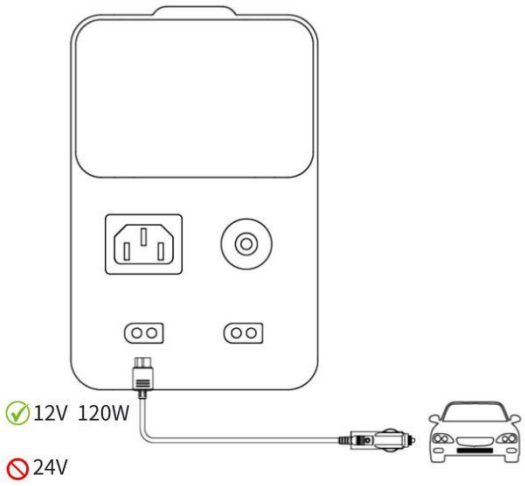


Dual Solar Input and Car Input (XT60)

- **Charging the Battery via Solar:** Each XT60 port accepts 11-60V (One XT60 port: 11-15V (10A); 15-60V (27A) max; 1,200W max per port, firmware v2.1.1 or later). Two XT60 ports can handle up to 2,400W in total. Exceeding 60V will damage the device.



- **Charging the Battery via Car Auxiliary:** Supports 12V (120W) via XT60. 24V is not supported.

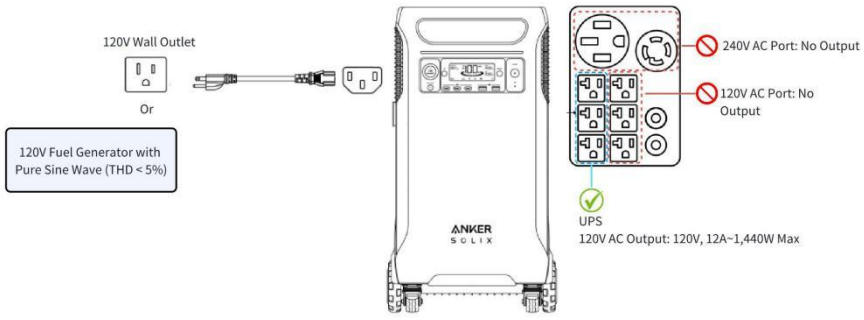


2.3 Connecting to a Wall Outlet (UPS Function)

- F3800 has three 120V UPS sockets. When connected to a wall outlet, the grid charges the battery and provides bypass power to the three 120V sockets.
  - **AC Recharging:** 120V, 15A, 1800W Max
  - **AC Bypass Output:** 120V, 12A, 1440W Max
- During a power outage, it switches to battery power in 20 ms.

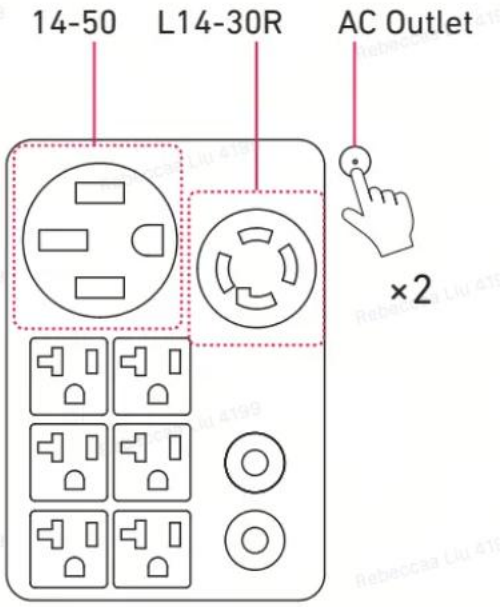
Note:

- F3800 can be powered by a fuel generator with a pure sine wave (THD < 5%) as an alternative to grid power.
- During grid bypass, the two 240V AC sockets and the other three 120V sockets have no output.



2.4 EV Mode Charging

- **Usage:** F3800 is for emergency EV charging only, not for regular use.
- **Supported Ports:** L14-30R or 14-50, 6,000W max output (240V/25A).



Note:

- Before charging an EV, set the charging current on the EV or charger to 25A or lower. F3800 does not support currents above 25A.
- In EV mode, F3800's 240V AC port is grounded. Ensure the neutral and ground wires in your main panel or transfer switch are properly connected for a safe power supply.

- **Steps:**

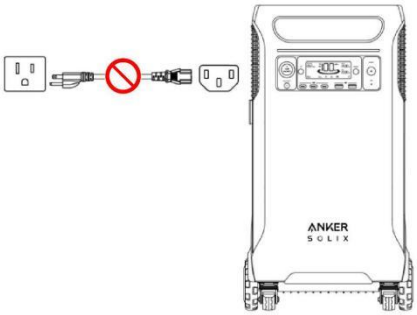
a. Double-tap the AC outlet button.

b. Wait for the car icon to appear on the display.

c. Connect the device to the F3800's L14-30R or 14-50 socket.

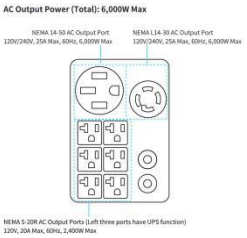
Note:

When the power station is in EV mode, it cannot be charged via AC simultaneously. Otherwise, the 240V socket will be inactive, and only the three 120V UPS sockets will have power.



2.5 AC Output

2.5.1 AC Output Overload Capacity

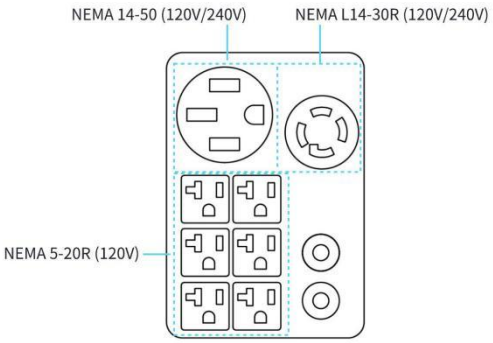
F3800 AC Output Power	F3800 Overload Capacity
	· Output Load Rate < 105% - Long-Term Operation · 105% ≤ Output Load Rate < 120% - 1 Min Operation · 120% ≤ Output Load Rate < 150% - 10 s Operation · 150% ≤ Output Load Rate < 170% - 5 s Operation · 170% ≤ Output Load Rate - 1 s Operation (Current Peak < 80A)

2.5.2 120V/240V AC Output Auto-Shutdown

The eight AC output sockets are controlled together and can be turned on or off by pressing the AC outlet button. If no device is detected and the power is less than 20W, the AC output will automatically turn off after 15 minutes.

· The six 120V sockets (5-20R) at the bottom are smart sockets that detect connected devices and stay on as long as a device is connected.

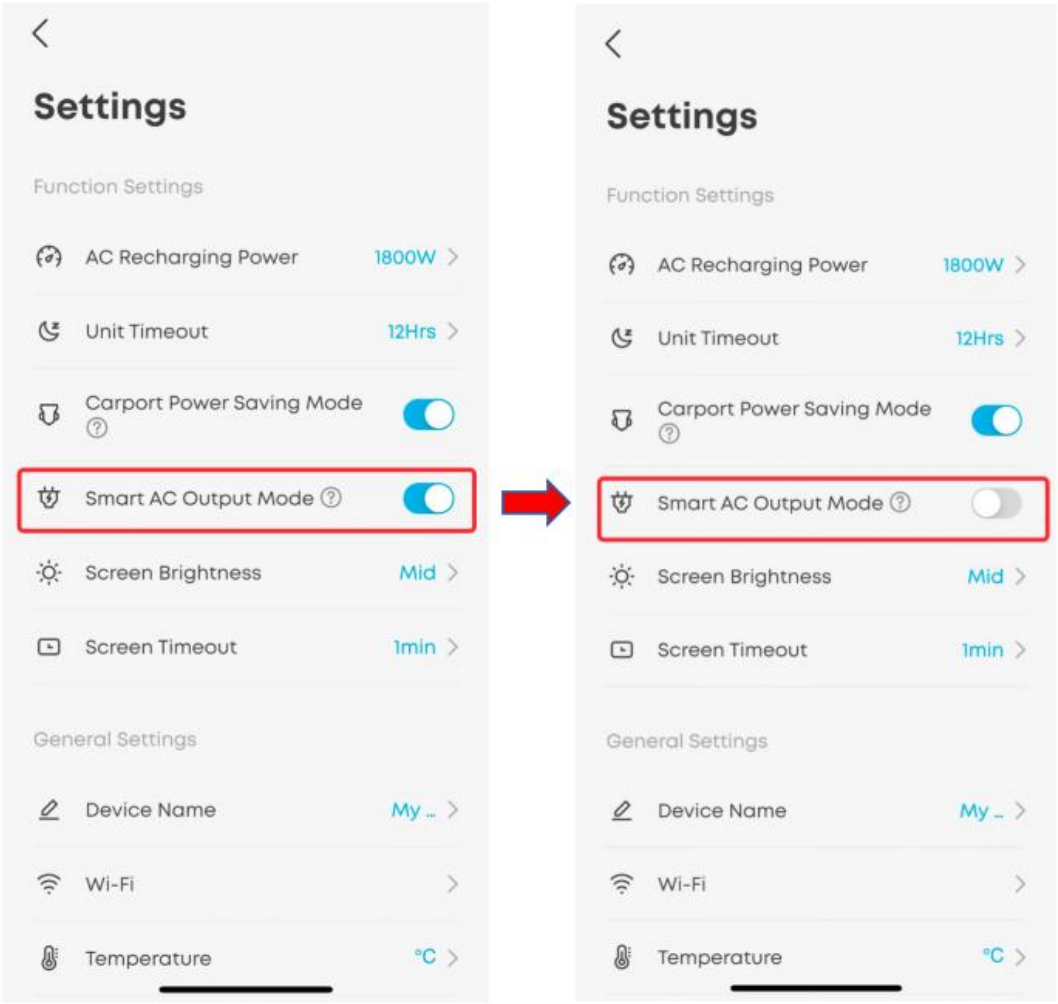
· The two 240V sockets (L14-30R and 14-50) at the top are non-smart sockets and cannot detect connected devices.



If the six 120V sockets at the bottom have no devices connected and the two 240V sockets at the top draw less than 20W, the AC output will automatically turn off after 15 minutes. This can happen with intermittently working devices like refrigerators or pumps.

Solution:

1. Plug a socket into one of the 120V smart sockets to prevent shutdown.
2. In the Anker app, go to the F3800 settings page and turn off Smart AC Output Mode. This keeps the AC output on.



2.6 Other Basic Functions

For other basic functions, please refer to the following materials.

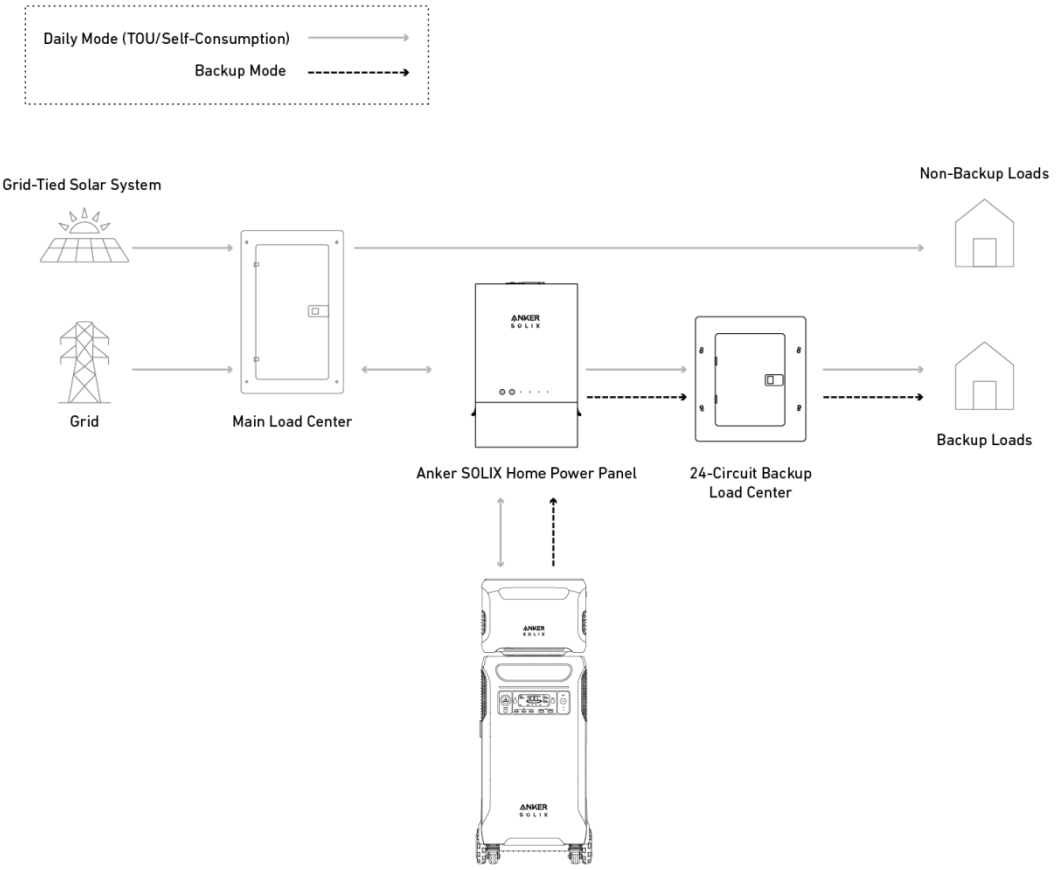
Product	Type	Reference Materials Link
Anker SOLIX F3800 Portable Power Station	User Guide	Anker SOLIX F3800 Portable Power Station User Guide
	Installation Video	Anker SOLIX F3800 | How-to Guide
Anker SOLIX BP3800 Expansion Battery	User Guide	Anker SOLIX BP3800 Expansion Battery User Guide
Anker SOLIX Double Power Hub	User Guide	Anker SOLIX Double Power Hub User Guide

3. F3800 Automatic Home Backup System (Smart Home Power Kit)

3.1 System Overview

Smartly integrate Anker SOLIX F3800, the utility grid, and your rooftop solar system for maximum power efficiency and seamless backup.

- When connected to the grid:
  - F3800 can be charged using a rooftop solar system.
  - F3800 can also be charged from the grid during super off-peak hours and supply power to the home during peak hours.
- During a power outage, F3800 will automatically supply power to the backup loads.



3.2 Component list

Product Name	Appearance	Functions
Anker SOLIX F3800 Portable Power Station		A 3,840Wh, 6,000W portable power station with multiple ports for powering devices during outages or outdoors. Note: When F3800 is connected to Home Power Panel, Home Power Panel controls the AC input and output. The AC input and output ports on F3800 itself are disabled.
Anker SOLIX BP3800 Expansion Battery		A 3,840Wh expansion battery. One F3800 can connect up to 6 expansion batteries, expandable to 26.9kWh. Two F3800 units can expand to 53.8kWh.

Anker SOLIX Home Power Panel		When on grid, it supports Self-Consumption, TOU, and Manual Backup modes. During a power outage, it controls F3800 to power the backup loads with a switching time of ≤ 20 ms.
Anker SOLIX Subpanel (24 Circuits,12 Spaces Backup Load Center)		Backup Load Center: During a power outage, the F3800 can power up to 12 loads connected to Anker SOLIX Subpanel.

3.3 Function and Limitations

3.3.1 Backup Function

Smart Home Power Kit has a backup function. During a power outage, Home Power Panel switches to F3800 to power backup loads. The load capacity is as follows:

Backup Output Power	F3800 Overload Capacity
· One F3800 provides up to 6kW (240V, 25A or 120V, 25A) through Home Power Panel. · Two F3800 units can provide up to 12kW (240V, 50A or 120V, 50A) through Home Power Panel.	· Output Load Rate < 105% - Long-Term Operation · 105% ≤ Output Load Rate < 120% - 1 Min Operation · 120% ≤ Output Load Rate < 150% - 10 s Operation · 150% ≤ Output Load Rate < 170% - 5 s Operation · 170% ≤ Output Load Rate - 1 s Operation
LRA	Operating Voltage Range
One F3800 LRA: 80A Two F3800s LRA: 160A	176～264V

Note:

· Avoid connecting high-power devices to the subpanel to avoid quickly depleting F3800.

The load should not exceed 25A (one F3800) or 50A (two F3800s).

- During a power outage, grid-tied solar inverters must stop supplying power to the grid due to anti-islanding requirements. In these instances, the solar system will not charge F3800 through Home Power Panel.

3.3.2 On-Grid Operation Functions

When on-grid, Home Power Panel integrates power from F3800, the utility grid, and the rooftop solar system to supply the home based on the selected mode.

Operating Modes	• Self-Consumption • Time of Use • Manual Backup Power
Power Sources	Solar, F3800, Grid
F3800 Output Limits	To extend battery life, Home Power Panel limits F3800's charge and discharge power when on-grid, ensuring long-term durability and efficiency. This limitation does not apply during power outages. When on-grid: • One F3800 provides about 1.92kW. • Two F3800s provide 3.8kW. • With more than three expansion batteries, the maximum output is 6kW. During a power outage: • One F3800 provides up to 6kW. • Two F3800 units provide up to 12kW.
Home Power Panel Protection Shutdown	• Input current < 55A, Home Power Panel will operate as normal. • Input current between 55A and 75A, Home Power Panel will shut down after 2 minutes. • Input current between 75A and 100A, Home Power Panel will shut down after 1 minute • Input current > 100A, Home Power Panel will shut down after 10 seconds. When Home Power Panel's shutdown protection activates, F3800 does not output. To reset, remove loads from F3800 and flip Home Power Panel's on/off switch to the on position.

Output power increases with additional expansion batteries. Please review this chart:

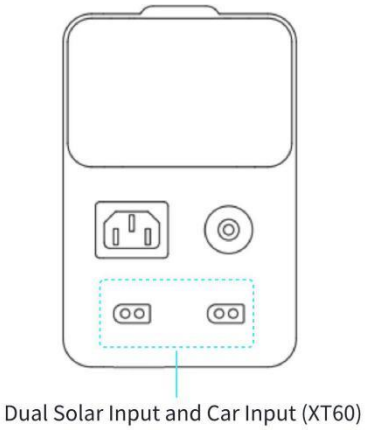
Configuration (Number of Units)		Self-Consumption or Time of Use Modes Activated		Manual Backup Power Mode Activated	During Power Outages
Number of F3800s	Number of BP3800s	Max Charging Power	Max Discharging Power	Max Charging Power	Max Discharging Power
1	0	1,900W	1,900W	3,800W	6,000W
1	1	2,660W	3,800W	6,000W	6,000W
1	2	3,800W	5,700W	6,000W	6,000W
1	3 or more	3,800W	6,000W	6,000W	6,000W
2	0	2× 1,900W	3,800W	6,000W	12,000W
2	2	5,320W	6,000W	6,000W	12,000W
2	3 or more	6,000W	6,000W	6,000W	12,000W

3.3.3 Rooftop Solar System

The Home Power Panel system is connected to a grid-tied solar inverter. During a power outage, grid-tied solar inverters must stop supplying power to the grid due to anti-islanding requirements. In these instances, the solar system will not charge F3800 through Home Power Panel.

If your solar panel voltage is between 11V to 60V, connect it directly to F3800's XT60 port to charge. If the voltage is over 60V, it cannot be used during a power outage.

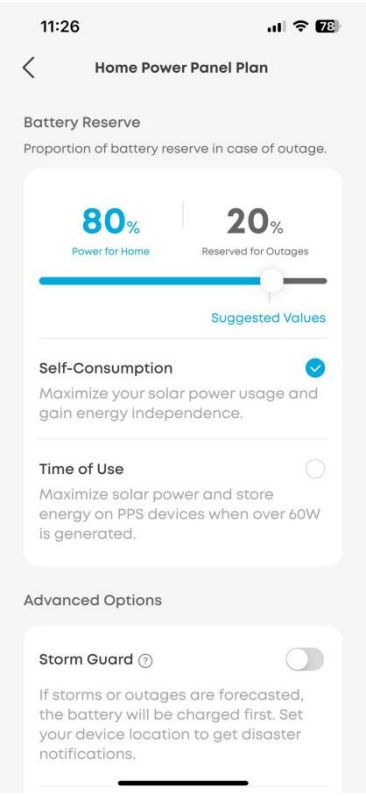
3.3.4 F3800 Solar Panel Connection



Each XT60 port accepts 11-60V (One XT60 port: 11-15V, 10A; 15-60V, 27A max; 1,200W max per port, firmware 2.1.1 or later). Two XT60 ports can handle up to 2,400W in total. Exceeding 60V will damage the device.

3.4 Operating Modes Overview

You can set the daily operating mode to Self-Consumption or Time of Use. You can also choose Manual Backup Power.



3.4.1 Self-Consumption

Features	Maximize the use of photovoltaic power and minimize the use of grid power.
Applicable Scenarios	We recommend to choose Self-Consumption mode if photovoltaic power generation is high and daytime load is low. Use photovoltaic power for loads and to charge the battery during the day. When there's no sunlight, the battery supplies power, minimizing grid use.
Prerequisites	A rooftop solar system is required with a 100A CT installed on the power line to collect power data.
Principle	· Maximize the use of photovoltaic power and reduce grid power consumption. · Photovoltaic power first supplies the load then charges the F3800 battery. Any excess is fed to the grid. · Power usage priority: Photovoltaic > F3800 Battery > Grid · Only photovoltaic power can charge the F3800 battery.
Note	When the F3800's battery level falls below the reserve value and there is no photovoltaic power, it will automatically charge from the grid until it reaches the reserve value.

3.4.2 Time of Use

· Overview

Applicable Scenarios	This mode applies to scenarios where there is a large price difference between peak and off-peak hours. You can charge the battery during low-price periods and use battery power during high-price periods.
Principle	Charge the F3800 battery during low-price periods and use the F3800 battery power during high-price periods to save on household electricity costs. There are four time periods to choose from. (Note: The grid can only charge the F3800 battery during the Super Off-Peak period): · Peak and Mid-Peak: High-price periods, battery discharges to supply household power. · Off-Peak: Standard-price period, the battery SOC discharges up to 20% to supply household power, reserving at least 80% for high-price periods. (If the battery reserve SOC is set to 90%, then up to 10% can be

	used to supply the household.) · Super Off-Peak: Low-price period, battery charges only, no discharge.
Note	When the F3800's battery level falls below the reserve value and there is no photovoltaic power, it will automatically charge from the grid until it reaches the reserve value.

· Operating Principle

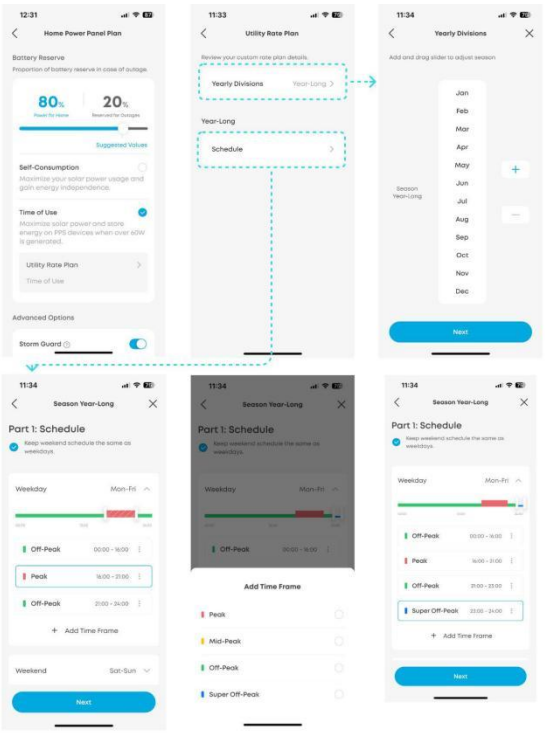
App Schedule Settings	When and How to Use
Peak/Mid-Peak	Suitable for high electricity price periods, the battery discharges to power the home. · Power Usage Priority: Photovoltaic > F3800 Battery > Grid · Photovoltaic Power Supply Priority: Load is supplied first, followed by the F3800 battery, and any excess is fed to the grid. · Only photovoltaic power can charge the F3800 battery.
Off-Peak	Suitable for standard-price periods, battery SOC discharges 20% to supply power to the household, reserving 80% for high-price periods. · Power Usage Priority: Photovoltaic > F3800 Battery > Grid · Solar Power Supply Priority: The load is supplied first, then the battery is charged with excess power, and any power that remains is fed to the grid. · Only photovoltaic power can charge the F3800 battery.
Super Off-Peak	Suitable for low-price periods, the battery only charges and does not discharge. The grid can charge the battery. · Power Usage Priority: Photovoltaic > Grid · Solar Power Supply Priority: First charge the battery, then supply the load with any excess · Battery Charging (From PV and Grid): Charging power is automatically adjusted based on battery SOC and available grid charging time.

· Setup Instructions

Your region may have two, three, or four different electricity prices. The method for setting the corresponding time periods in the app is as follows:

Actual Local Electricity Prices		How to Set Time Periods in the App and Working Logic	
Type	Electricity Price	Time Period in App	Working Logic
Two Electricity Prices	Peak	Peak	High-price periods, battery discharges to supply power to the household.
	Off-Peak	Super Off-Peak	Low-price periods, battery charges only, does not discharge. The grid can charge the battery.
Three Electricity Prices	Peak	Peak	High-price periods, battery discharges to supply power to the household.
	Mid-Peak	Mid-Peak or Off-Peak	Choose Mid-Peak or Off-Peak: · If you need the battery to discharge even when the SOC is below 80%, choose Mid-Peak. · If you need the battery to stop discharging when the SOC is below 80%, choose Off-Peak.
	Off-Peak	Super Off-Peak	Low-price periods, battery charges only, does not discharge. The grid can charge the battery.
Four Electricity Prices	Peak	Peak	High-price periods, battery discharges to supply power to the household.
	Mid-Peak	Mid-Peak	High-price periods, battery discharges to supply power to the household.
	Off-Peak	Off-Peak	Standard-price periods, the battery discharges up to 20% SOC to supply household power, reserving at least 80% SOC for high-price periods.
	Super Off-Peak	Super Off-Peak	Low-price periods, battery charges only, does not discharge. The grid can charge the battery.

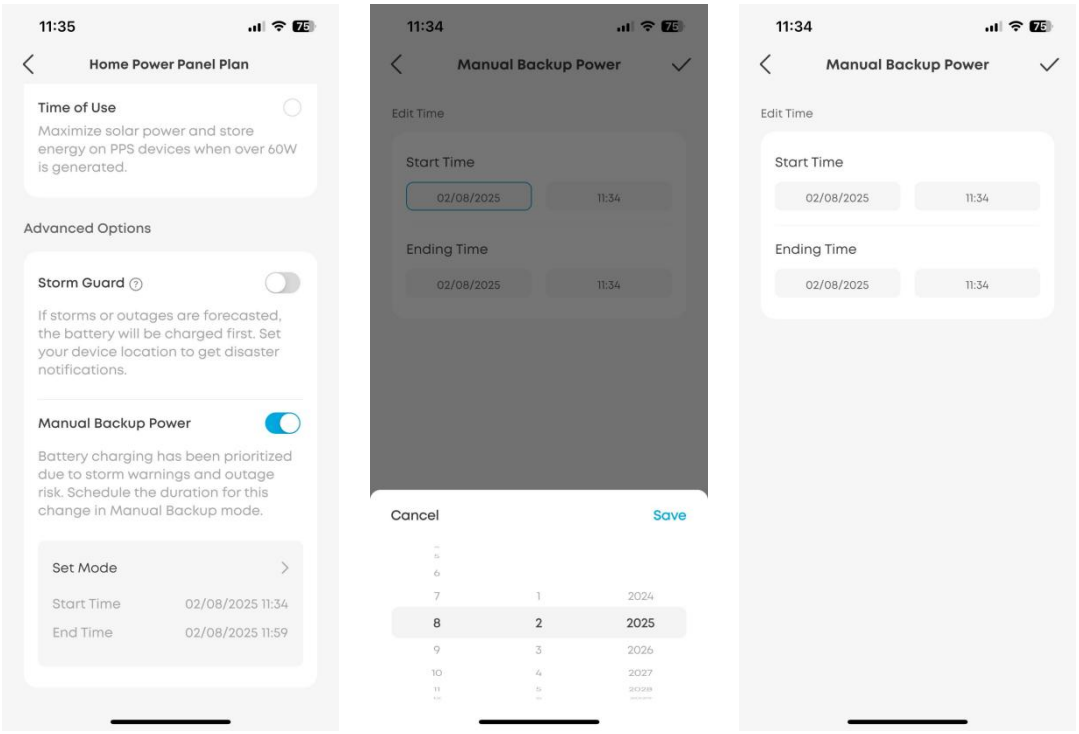
- Setup Instructions



3.4.3 Manual Backup Power

Applicable Scenarios	Manual Backup Power: Implement emergency power storage and backup functions before a power outage occurs due to severe weather.
Principle	Set a time when you want your battery to quickly charge to 100%. In this mode, the battery charges at maximum power, using PV power first. If PV power is insufficient, PV and grid supply power together. • **Power usage priority**: PV > Grid. • **Solar power supply priority**: First charge the battery, then supply the load with any excess • **Battery charging**: comes from PV and Grid. Charging at maximum power.

Setup Instructions:



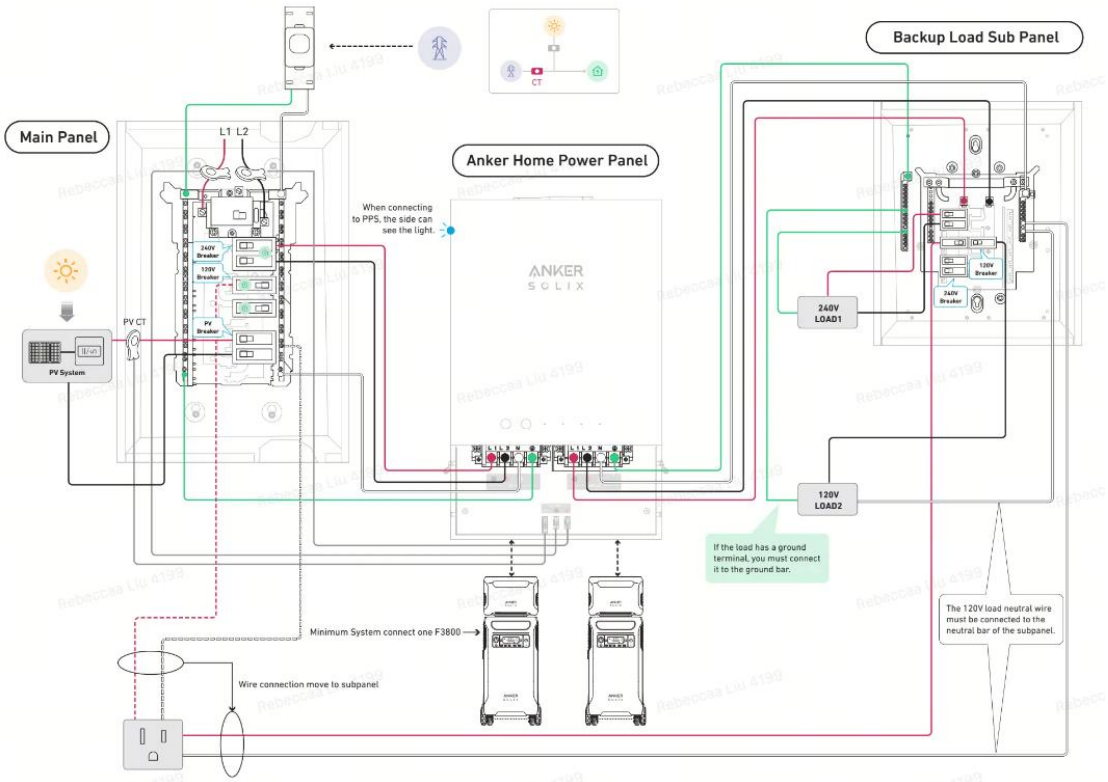
3.5 Installation Requirements and Guide

3.5.1 Installation Environment Requirements

- Environmental Requirements
  - Do not expose the equipment to flammable or explosive gases or smoke. Do not operate the equipment in such environments.
  - Do not store flammable or explosive materials near the equipment.
  - Install the equipment in a well-ventilated area away from liquids.
  - Take precautions when installing in areas prone to natural disasters (e.g., floods, mudslides, earthquakes, hurricanes).
  - Avoid exposing the product to rain or using it in humid environments.
- Storage and Operating Temperature Range:
  - Equipment Operating Temperature: -4°F to 104°F / -20°C to 40°C
  - Battery Charging Temperature: 32°F to 104°F / 0°C to 40°C
  - Battery Discharging Temperature: -4°F to 104°F / -20°C to 40°C

  To prolong battery life, we recommend to use or store the product at temperatures between 68°F and 86°F / 20°C and 30°C.

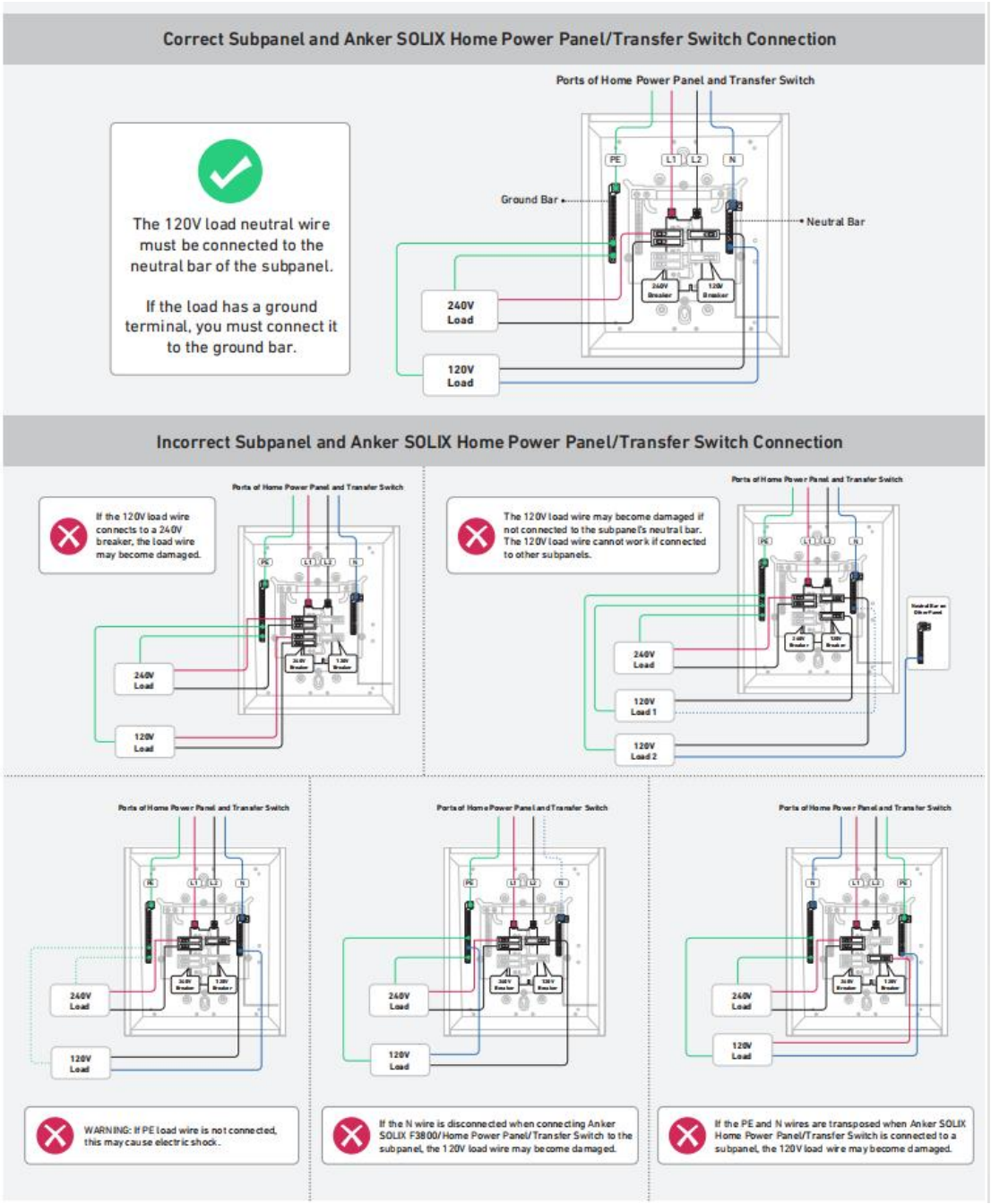
3.5.2 Recommended Wiring Method



For more CT connection methods, see: Anker SOLIX Home Power Panel Troubleshooting "5.1 Other CT Connection Methods."

3.5.3 Installation Requirements

WARNING: Confirm the wires inside the subpanel are properly connected. If not, the connection may cause electrical damage to the circuit.



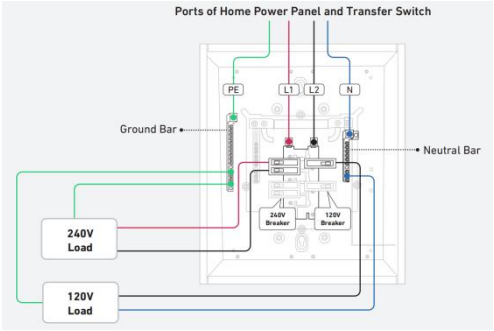
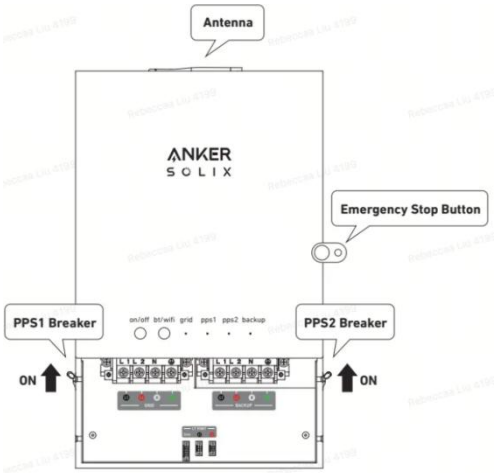
3.5.4 Power On Operation Guide

1. Pre-Power-On Check for Home Power Panel

Before turning on the breaker in the main panel that supplies power to Home Power Panel, please confirm the following information:

Note: HPP is short for Home Power Panel. PPS is short for Anker SOLIX F3800 Portable Power Station.

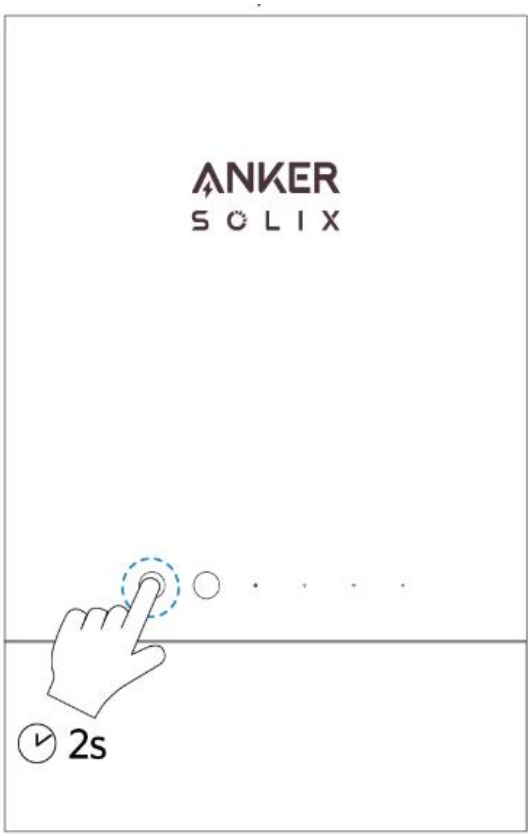
No.	Check Item	Details	Reference Image

1	Wiring	Carefully check if the connections of each subpanel are correct according to the Recommended Connection Diagram, especially the subpanel load's N wire that connects to the Home Power Panel backup.	
2	Button and Breaker Status	1. Confirm the emergency stop button is turned on. 2. Confirm the PPS1 and PPS2 breakers are turned on.	
3	Wi-Fi Antenna	Confirm the Wi-Fi antenna has been raised.	
4	CT	The CT of L1/L2 has been clamped to the correct position. Note: The wrong position of the PV CT does not affect the self-test. It does affect electricity price calculation.	/
5	F3800	Before connecting F3800 to HPP: 1. Use the Anker app to connect. Confirm the F3800 firmware version is 1.7.6 or above. If not, update to the latest	/

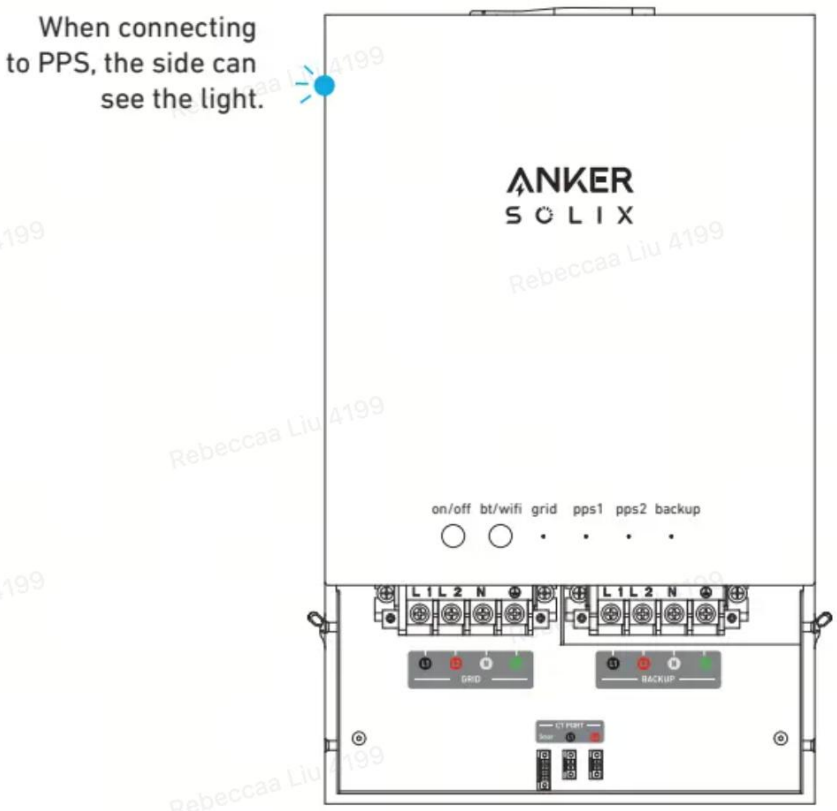
		firmware. 2. The battery SOC of the F3800 is <95%. If above this amount, the self-test will be affected.	

2. Power on Home Power Panel.

a. Turn on the breaker that supplies power to HPP in the main panel, supply power to HPP, and press the on/off button for 2 seconds to turn it on.



b. After powering on, confirm the indicator light is in the upper left as shown.



No.	Check Item	Details
1	Flashing on/off light.	Self-test was not performed or was unsuccessful.
2	Flashing Bluetooth light.	App has not connected.
3	Steady grid light.	Grid voltage is normal.
4	After connecting PPS, light activates on upper left of HPP.	HPP recognizes physical connection to PPS.
5	PPS 1 / PPS 2 Lights: Steady light with PPS connected. HPP icon appears in lower right of LCD when connected to F3800.	Normal commuincation between PPS and HPP.

6	Steady backup light.	Backup two-phase voltage is normal when connected to grid.

3. Use the Anker app to connect to HPP.

   After the connection, the Bluetooth light remains on. Perform the self-test according to the app prompts:

   a. Confirm that the firmware is upgraded to the latest version.

   b. Wait for the self-test to complete.

   c. Select the CT connection method.

   d. Select reserved power.

   e. Select Self-consumption or Time of Use mode. After the self-test is completed, the on/off light remains on.

3.6 Reference Materials

For more information on installation, usage, and troubleshooting, please refer to the following materials.

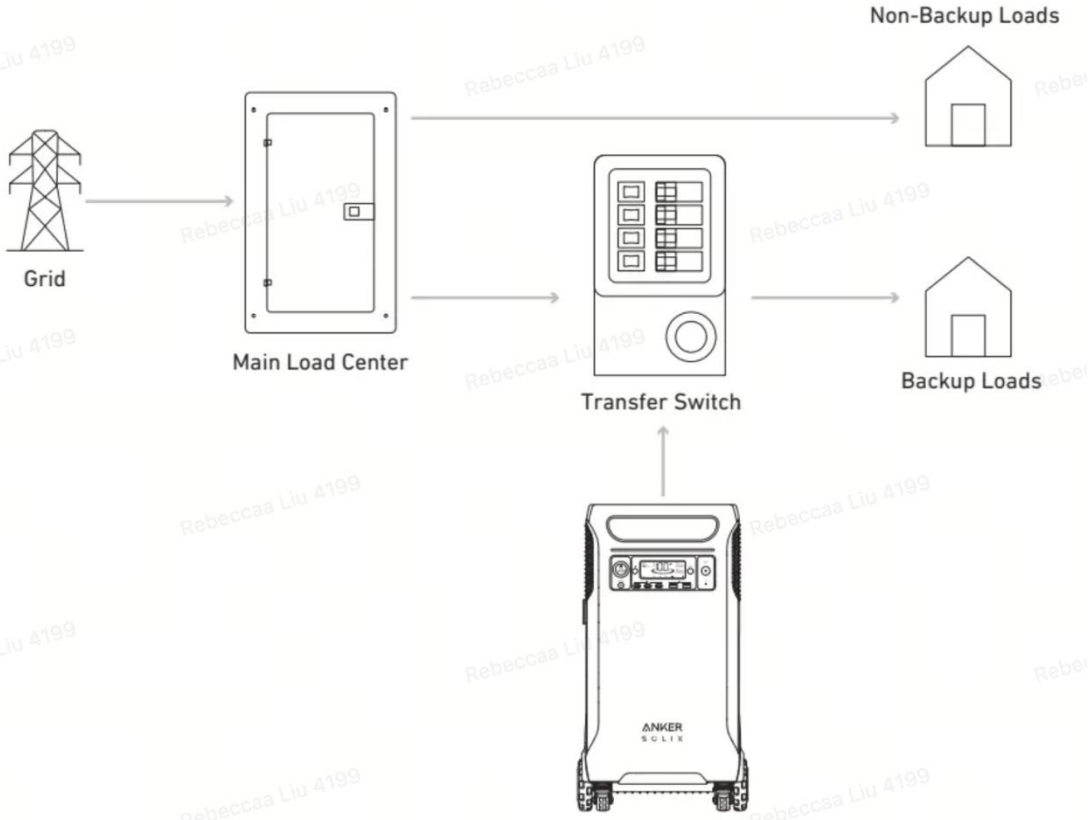
Product	Type	Reference Materials
Anker SOLIX F3800 Portable Power Station	User Guide	Anker SOLIX F3800 Portable Power Station User Guide
	Installation Video	Anker SOLIX F3800 | How-to Guide
Anker SOLIX Home Power Panel	User Guide	Anker SOLIX Home Power Panel User Guide
	Installation Guide	Anker SOLIX Home Power Panel Installation Guide
	Troubleshooting	Anker SOLIX Home Power Panel Troubleshooting
	Installation Video	How to Install Anker SOLIX Home Power Panel
	Commissioning Video	How to Use Anker App to Set up Anker SOLIX Home Power Panel

Anker SOLIX BP3800 Expansion Battery	User Guide	Anker SOLIX BP3800 Expansion Battery User Guide

4. F3800 Manual Backup System (Home Backup Kit)

4.1 System Overview

The Home Backup Kit includes a transfer switch. During a power outage, manually switch to F3800 to power household appliances. When F3800 is fully discharged, disconnect it from the transfer switch and charge it using a wall outlet.



4.2 Component list

Product Name	Appearance	Functions

Anker SOLIX F3800 Portable Power Station		A 3,840Wh, 6,000W portable power station with multiple ports for powering devices during outages or outdoors. Note: · One F3800 connects to the transfer switch via the 240V port. · Two F3800 units connect to the transfer switch via the 240V/50A port on Double Power Hub.
Anker SOLIX BP3800 Expansion Battery		3,840Wh Expansion Battery One F3800 can connect up to 6 expansion batteries, expandable to 26.9kWh. Two F3800 units can expand to 53.8kWh.
Anker SOLIX Double Power Hub		Connecting two Anker SOLIX F3800 units increases the maximum output from 6,000W, 25A to 12,000W, 50A.
Anker SOLIX Transfer Switch		During a power outage, F3800 provides emergency power to home loads through the transfer switch.

4.3 Backup Function

Home Backup Kit has a backup function. During a power outage, manually set the transfer switch to F3800 to power the backup loads. Load capacity is as follows:

Backup Output Power	F3800 Overload Capacity
· One F3800 can provide up to 6kW (240V, 25A or 120V, 25A) through Home Power Panel. · Two F3800 units can provide up to 12kW (240V, 50A or 120V, 50A) through Home Power Panel.	· Output Load Rate < 105% - Long-Term Operation · 105% ≤ Output Load Rate < 120% - 1 Min Operation · 120% ≤ Output Load Rate < 150% - 10 s Operation

	• 150% ≤ Output Load Rate < 170% - 5 s Operation • 170% ≤ Output Load Rate - 1 s Operation

4.4 Installation Requirements and Guide

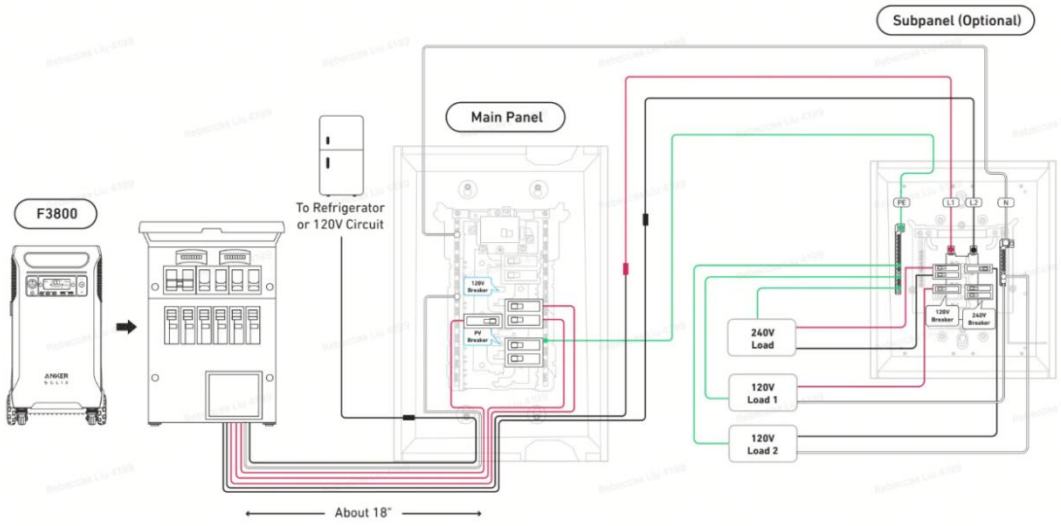
4.4.1 Installation Environment Requirements

- Environmental Requirements
  - Do not expose the equipment to flammable or explosive gases or smoke. Do not operate the equipment in such environments.
  - Do not store flammable or explosive materials near the equipment.
  - Install the equipment in a well-ventilated area away from liquids.
  - Take precautions when installing in areas prone to natural disasters (e.g., floods, mudslides, earthquakes, hurricanes).
  - Avoid exposing the product to rain or using it in humid environments.
- Storage and Operating Temperature Range:
  - Equipment Operating Temperature: -4°F to 104°F / -20°C to 40°C
  - Battery Charging Temperature: 32°F to 104°F / 0°C to 40°C
  - Battery Discharging Temperature: -4°F to 104°F / -20°C to 40°C

  To prolong battery life, we recommend to use or store the product at temperatures between 68°F and 86°F / 20°C and 30°C.

4.4.2 Recommended Wiring Method

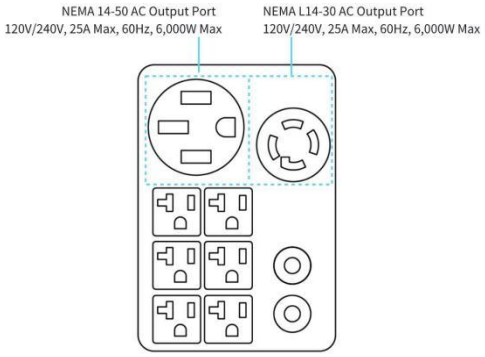
1. Connect the transfer switch.



Warning:

- Check and ensure the neutral (N) and ground (PE) wires of the inlet box or transfer switch are properly connected.
- Beware that missing neutral (N) and ground wires may cause appliances damaged on the circuit.

2. Connect F3800.
   - For one F3800: Plug the power cable into the 240V port.
   - For two F3800s: Plug the power cable into the 240V port of Double Power Hub.



One F3800

Two F3800s + Double Power Hub

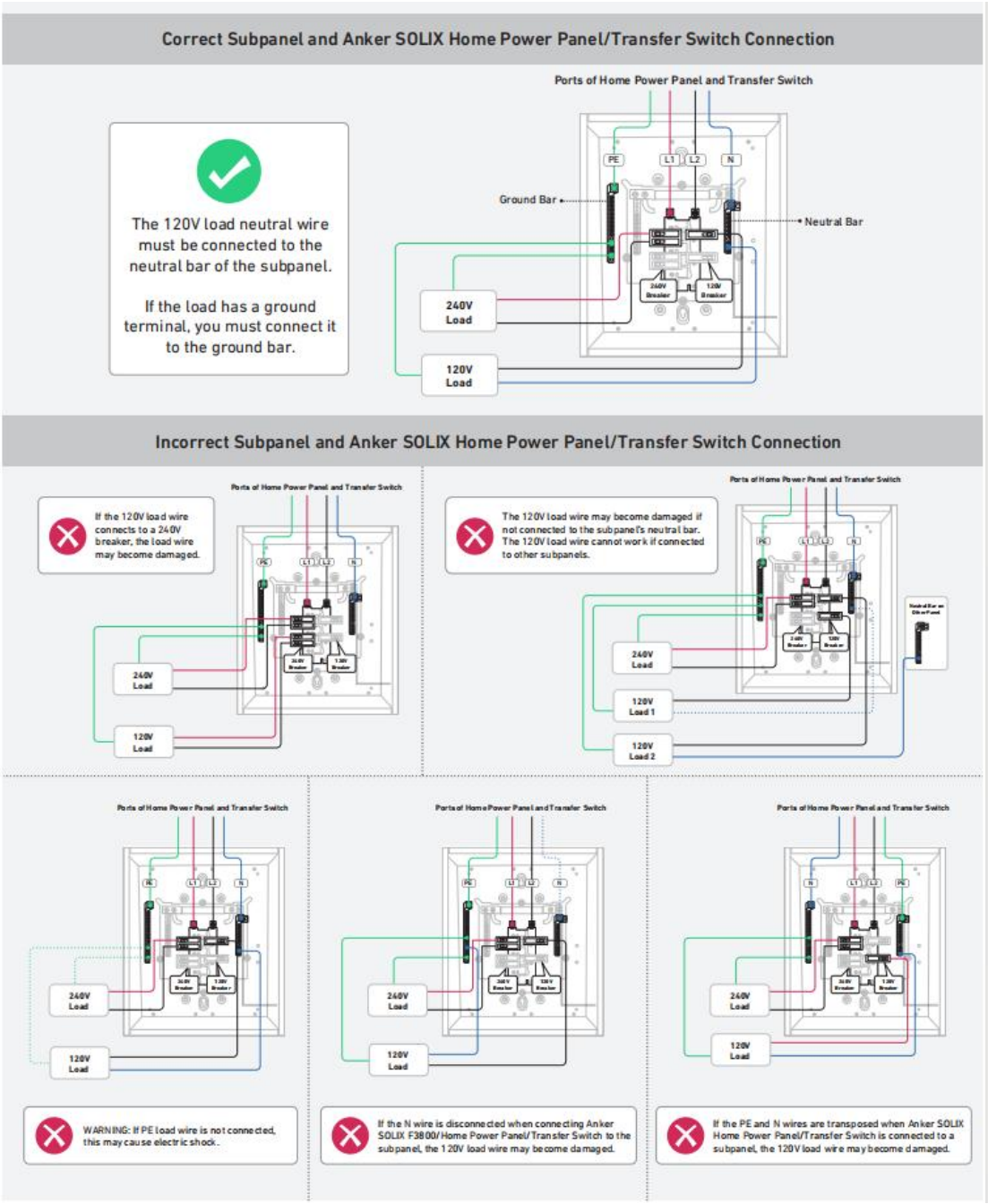
Note:

For 240V, use either a NEMA 14-50 or L14-30 cable, depending on your outlet.

3. Connect the other end of the power cable to the transfer switch.
4. Manually switch the transfer switch to F3800 for emergency backup power.

4.4.3 Installation Requirements

WARNING: Before connecting your Anker SOLIX F3800 to a transfer switch or a subpanel with an inlet box, confirm the wires inside the transfer switch or subpanel are properly connected. If not, the connection may cause electrical damage to the circuit.



4.4.4 Reference Materials

For detailed installation and wiring instructions, refer to the following materials.

Product	Type	Reference Materials
Anker SOLIX F3800 Portable Power Station	User Guide	Anker SOLIX F3800 Portable Power Station User Guide
	Installation Video	Anker SOLIX F3800 | How-to Guide

Anker SOLIX BP3800 Expansion Battery	User Guide	Anker SOLIX BP3800 Expansion Battery User Guide
Anker SOLIX Double Power Hub	User Guide	Anker SOLIX Double Power Hub User Guide
Anker SOLIX Transfer Switch	Installation Video	1. How to install transfer Switch 01/06 2. How to install Transfer Switch 02/06 3. How to install Transfer Switch 03/06 4. How to install Transfer Switch 04/06 5. How to install Transfer Switch 05/06 6. How to install Transfer Switch 06/06

Appendix 1: Component Specifications

Anker SOLIX F3800 Specifications

Model	A1790
Battery Type	LFP
Cell Part Number	32140FS-15000mAh
Cell Number	80
Cell Capacity	51.2VDC 75Ah/3,840Wh
AC Input	120V~15A (3 Hr Max), 12A (Continuous), 60Hz L+N+PE
AC Input Power (Charging)	1,800W Max
AC Input Power (Bypass Mode)	1,440W Max
Solar Panel Input 1	11-32V, 10A; 32-60V, 25A (1,200W Max, Firmware v1.7.8 or Earlier)

	11-15V, 10A; 15-60V, 27A Max (1,200W Max, Firmware v2.1.1 or Later)
Solar Panel Input 2	11-32V, 10A; 32-60V, 25A (1,200W Max, Firmware v1.7.8 or Earlier) 11-15V, 10A; 15-60V, 27A Max (1,200W Max, Firmware v2.1.1 or Later)
Car Charger Output	12V, 10A
Home Panel Power Port	3,800W Max (AC Input), 6,000W Max (AC Output), 120V/240V, L1+L2+N+PE
AC Output Power (Total)	6,000W Max
AC Output (NEMA 5-20R)	120V~20A Max, 60Hz, 2,400W Max
AC Output (NEMA 14-50 / L14-30)	120/240V~25A Max, 60Hz, 6,000W Max
USB-A Output	5V, 2.4A (12W Max per Port)
USB-C Output	5V, 3A / 9V, 3A / 15V, 3A / 20V, 3A / 20V, 5A (100W Max per Port)
UPS	20 ms
Discharging Temperature	-4°F to 104°F / -20°C to 40°C
Charging Temperature	32°F to 104°F / 0°C to 40°C
Size	27.6 × 15.3 × 15.6" / 70.2 × 38.8 × 39.5 cm
Net Weight	132.2 lb / 60 kg

Anker SOLIX Home Power Panel Specifications

Model	A17B1
Product Weight	19 lb / 8.8 kg
Product Dimensions	19.7 × 13 × 5.7" / 500 × 330.2 × 144.8 mm
Installation	Wall
Rated System Voltage	120/240V AC
Grid Wiring Area (Input)	18kW Max, 75A Max, 60Hz, L1+L2+N+PE
Grid Wiring Area (Output)	6kW Max (Continuous), 25A Max (Continuous), 60Hz, L1+L2+N+PE
Overvoltage Protection of Grid Wiring Area	Phase Voltage: • Overvoltage Point: 135 ± 3V • Duration: 200 ms • Recovery Point: 132 ± 3V • Recovery Time: 30 s Line Voltage: • Overvoltage Point: 270 ± 3V • Duration: 200 ms • Recovery Point: 265 ± 3V • Recovery Time: 30 s
Undervoltage Protection of Grid Wiring Area	Phase Voltage: • Undervoltage Point: 83 ± 3V • Duration: 200 ms • Recovery Point: 86 ± 3V • Recovery Time: 30 s Line Voltage: • Undervoltage Point: 166 ± 3V

	• Duration: 200 ms • Recovery Point: 172 ± 3V • Recovery Time: 30 s
Backup Wiring Area (Output)	12kW Max (Continuous), 50A Max (Continuous), 60Hz, L1+L2+N+PE
Power Station 1 Ports (Input)	6kW Max, 25A Max, 60Hz, L1+L2+N+PE
Power Station 1 Ports (Output)	3.8kW Max (Continuous), 15.8A Max (Continuous), 60Hz, L1+L2+N+PE
Power Station 2 Ports (Input)	6kW Max, 25A Max, 60Hz, L1+L2+N+PE
Power Station 2 Ports (Output)	3.8kW Max (Continuous), 15.8A Max (Continuous), 60Hz, L1+L2+N+PE
Power Stations 1 and 2 Ports (Total Output)	6kW Max (Continuous), 25A Max (Continuous), 60Hz, L1+L2+N+PE
Power Stations 1 and 2 Ports (Total Input)	12kW Max (Continuous), 50A Max (Continuous), 60Hz, L1+L2+N+PE
Output Power Factor Rating	One Anker SOLIX F3800, (30% Load) 1.9kW Load, PF > 0.96 Two Anker SOLIX F3800s, (60% Load) 3.8kW Load, PF > 0.98 Two Anker SOLIX F3800s, (100% Load) 6kW Load, PF > 0.985
Nominal Output Voltage (AC)	120/240V
Normal Output Frequency	60Hz
Normal Temperature Range Operation	-4°F to 104°F / -20°C to 40°C

Anker SOLIX Double Power Hub Specifications

Model	A17B2
Input Voltage	120/240V, 60Hz
Output Voltage	240V, 60Hz
Max AC Input / Output Power	12,000W Max, 120/240V, 50A Max, 60Hz, L1+L2+N+PE
Operational Temperature Range	-4°F to 104°F / -20°C to 40°C
Dimensions	14.8 × 4.1 × 2.4" / 376 × 104.5 × 61.3 mm
Net Weight	7.87 lb / 3.57 kg

Anker SOLIX BP3800 Expansion Battery Specifications

Cell Capacity	51.2VDC, 75Ah / 3,840Wh
Expansion Battery Port Input	75A Max
Expansion Battery Port Output	170A Max
Discharging Temperature	-4°F to 104°F / -20°C to 40°C
Charging Temperature	32°F to 104°F / 0°C to 40°C
Size	15.5 × 14.0 × 10.3" / 39.3 × 35.5 × 26.2 cm
Net Weight	72 lb / 33 kg

Anker SOLIX Transfer Switch Specifications

Model	A17B3
Voltage	125/250V
Frequency	60Hz
Rated Watts	12,500W
Rated Amps	50 Amps
Conduit Length	18" / 45.72 cm
Number of Circuit Breakers	(10) Total Circuits: (6) 15A Single-Pole, (1) 20A Double-Pole, and (1) 30A Double-Pole
Weight	16.05 lb / 7.28 kg
Product Dimensions	4.6 × 4.4 × 1.9" / 11.75 × 11.25 × 4.75 cm

Appendix 2: Normal inquiries

Q1: When recharging F3800 with a 120V AC input, can I use its 240V output socket to charge other devices?

No, when F3800 is recharging via the 120V AC input, you can only use its three 120V UPS sockets to charge other devices. The other three 120V ports and 240V ports do not function. The connected devices get power directly from the power grid.

It supports 1,440W UPS. During a power outage, F3800 switches to battery power within 20 ms, ensuring uninterrupted AC output. When grid power is restored, it switches back automatically.

Note: If the battery depletes during a long outage, F3800 will shut down all output ports. The AC output must be manually turned on by pressing the AC outlet button once grid power is restored.

Q2: Can F3800 be powered by a fuel generator or other generators?

F3800 can be powered by a 120V fuel generator, provided it is a pure sine wave generator (THD less than 5%). You can also adjust the AC input of F3800 via the Anker app, with a minimum input of 200W. If the generator does not produce a pure sine

wave, it cannot power F3800 or any other power station.

Q3: How should I store and maintain the power station?

When storing your power station, please make sure that you:

1. Turn off the main power button.
2. Store the power station in a dry and cool environment.
3. Check the remaining battery capacity each week. If the battery level is below 30%, fully charge the power station. Additionally, we recommend to charge the battery to 100% every three months, then discharge it completely, and finally charge it between 50% to 80%.

Note:

F3800 can be placed horizontally (flat) or vertically.

Q4: Can the rooftop solar system charge F3800 through Home Power Panel during a power outage?

The rooftop solar system cannot charge F3800 through Home Power Panel in the event of a power outage. To charge F3800 during an outage, the solar panels must be connected directly to the unit via the XT60 ports.

If your rooftop solar array offers an output voltage of less than 60V, during an outage, you can try to disconnect the rooftop solar array from the inverter and connect it to F3800 via the XT60 ports directly.

If your rooftop solar array offers an output voltage of more than 60V, it cannot power F3800 directly.

Q5: Why is the power of F3800 only about 1.9kW when connected to Home Power Panel when there is grid power?

To preserve the battery's life, the discharge rate is limited under grid-connected conditions, even though the unit has a rated capacity of 6kW. This precaution ensures the durability and efficient performance of the system over time.

When connected to the grid, a single F3800 unit connected to your Home Power Panel can deliver approximately 1.92kW to the load. If you add one more F3800 to the Home Power Panel, it can offer 3.8kW output to the load. When you add more than three extension batteries to Home Power Panel, the maximum combined output can reach up to 6kW.

In the event of a power outage, a single F3800 unit can provide a maximum output of 6kW through Home Power Panel. Two F3800 units can provide a maximum output of

12kW through Home Power Panel.

Appendix 3: Troubleshooting

Q1: What should I do if I cannot connect F3800 to the Anker app via Bluetooth?

If you cannot connect F3800 to the Anker app via Bluetooth, try the following steps:

1. Remove F3800 from the Anker app and then press the F3800 IoT button for more than 7 seconds to unpair it.
2. Afterward, press the IoT button once, and attempt to search for and reconnect F3800 to see if the issue persists.

If the issue still persists, contact Anker customer service and provide the following information:

1. Use another device to record a short video demonstrating the issue.
2. Upload the logs for further analysis.
3. Provide the serial number (SNXXXX) on the back of the power station.

Q2: What should I do if I cannot connect F3800 to the app via Wi-Fi?

If you cannot connect F3800 via Wi-Fi, you can attempt to connect F3800 to your phone's hotspot (2.4GHz only) without using the router to see if the issue still occurs. If the F3800 connection is stable, the problem may be caused by the Wi-Fi connection. In this situation, you can try to resolve the problem by completing the following steps:

1. Ensure you are connecting to a 2.4GHz Wi-Fi network, not a 5GHz network.
2. Please confirm if the Wi-Fi username and password have been entered correctly.
3. Ensure that your usage area is consistent with the registration area.
4. Check the distance between your router and F3800. If possible, move F3800 to a position that is within 33 ft / 10 m of the router. Also, try to minimize obstacles and walls between them to ensure that there is a strong Wi-Fi signal. Alternatively, add more repeaters to enhance the signal.
5. Try removing the device from the Anker app and then press the IoT button on the main unit for more than 7 seconds to unpair it. Afterward, attempt to search for and reconnect the device to see if the issue persists.

If the issue still persists, contact Anker customer service and provide the following information:

1. Please provide the model of your router, the phone model, and the app version.

2. Please provide the serial number (SN XXXX) on the back of the power station.
3. Upload the logs (both app logs and device logs) for further analysis.
4. Please use another device to record a short video showing the issue.

Q3: Why is the charging power only around 680W or 700W at low temperatures? Why is F3800 charging slowly?

Due to the characteristics of the cell batteries, the charging current is limited to below 700W when the cell temperature is below 50°F / 10°C. Please charge for a while until all cell temperatures rise above 50°F / 10°C, at which point the charging power can reach its maximum of 1,800W.

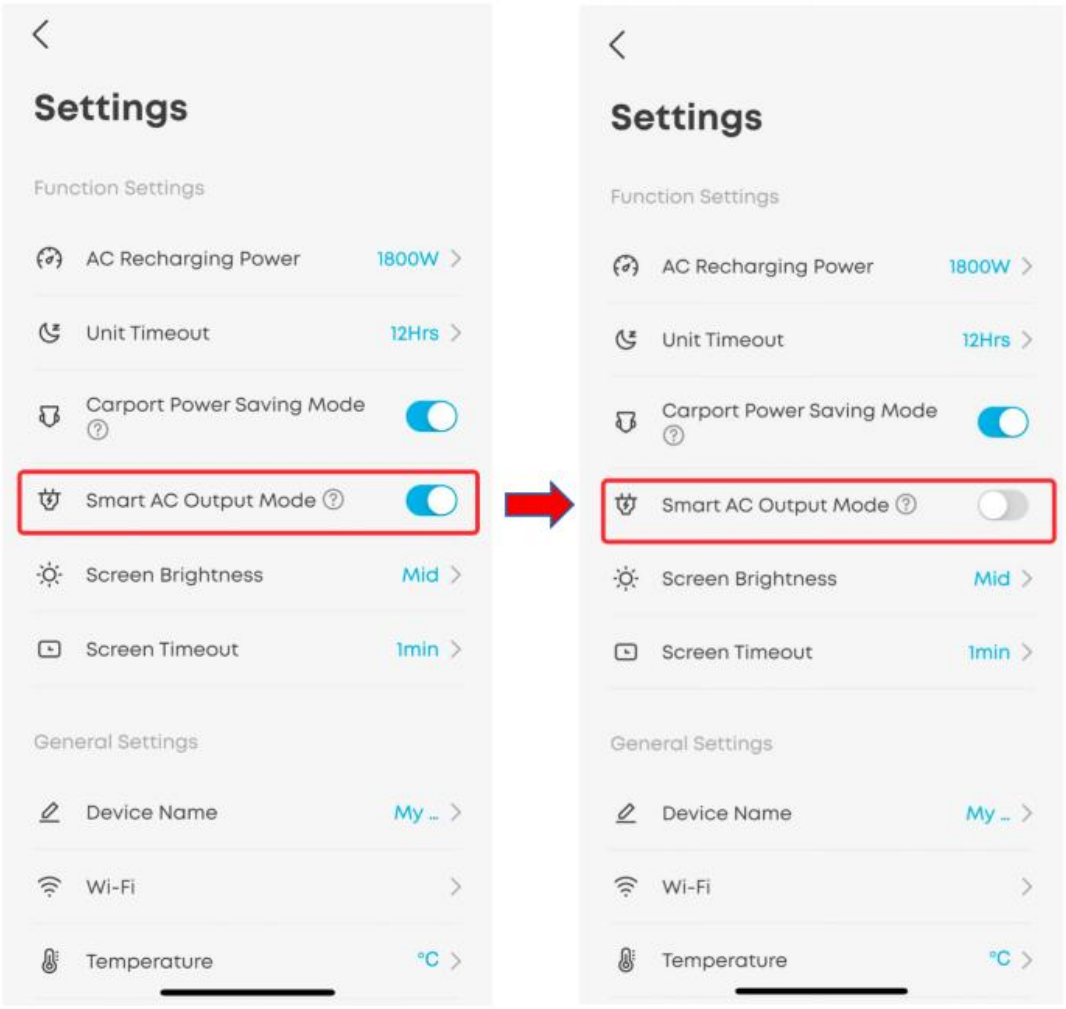
You can connect to the Anker app to check battery cell temperatures.

Q4: Why does the AC port of F3800 shut off automatically?

The eight AC output sockets are controlled together. You can turn them on or off by pressing the AC outlet button. If the system detects no device connected to the AC output sockets and the power is less than 20W, the AC output will automatically turn off after 15 minutes.

Solutions:

- Plug a socket into one of the 120V smart outlets (without connecting a device). This way, the smart outlet detects a connected device and will not shut off the output.
- Or, in the Anker app, go to the F3800 settings page and turn off Smart AC Output Mode. This will keep the AC output on.



Q5: Why can't solar panels offer full output to F3800?

1. Please update the firmware to the latest version. Then try using the solar panel to see if it works better.

2. If you have more than one solar panel to power F3800, please test each solar panel individually to see how it works.

3. Factors that can influence the output power of solar panels include:

   - Illuminance: The amount of light that the solar panel receives directly impacts its output power. The higher the light intensity, the more power the solar panel can generate.

   - Angle: The angle at which the sunlight hits the solar panel also plays a significant role. The optimal angle can vary depending on your geographical location and the time of year.

   - Temperature: Solar panels are sensitive to temperature. High temperatures can reduce the efficiency of solar panels, thus decreasing their output power.

   - Panel Shading: The surface of the solar panel should not be blocked during use. Shadows, foreign objects, and shading from glass can all significantly reduce

power output.

If the issue still persists, contact Anker customer service and provide the following information:

- Photos of the solar panel from various angles.
- The duration of exposure to sunlight before measuring the power output.
- Whether the solar panel feels hot to the touch when operating at this power level.
- If you used an extension cable and how long is the cable that connects F3800 and the solar panels (If possible, try removing the extension cable).
- A short video showing how you use the solar panels to power F3800.