

F3800 and Home Power Panel

Common Issues & Troubleshooting

Compatibility.....	2
F3800.....	2
System Composition.....	2
Home Power panel with F3800.....	6
Transfer Switch with F3800.....	7
Common Issues.....	7
F3800.....	7
1. Common Questions.....	7
2. UPS Mode.....	12
3. Bluetooth Connection.....	14
5. 30% Tax Credit/Residential Clean Energy Credits.....	14
Double Power Hub.....	14
1. How to connect two F3800s ?	14
Home Power Panel with F3800.....	14
1. Common questions.....	15
3. Installation.....	16
4. Certification.....	16
12-Circuit Backup Load Center (Subpanel).....	16
1. Specification.....	16
2. Installation.....	16
Transfer Switch with F3800.....	24
1. Specifications.....	24
2. Installation.....	24
3. Certification.....	25
Solar Panel with F3800.....	25
Anker App.....	26
User Guide.....	27
F3800.....	27
1. Discharging.....	27
2. Charging.....	29
3. Wi-Fi Connection.....	32
4. Noise.....	33
Appendix.....	34
Specifications And Configuration.....	34
Product Info.....	37
1. F3800.....	37
2. Home power panel with F3800.....	37
4. Transfer Switch with F3800.....	38

Compatibility

F3800

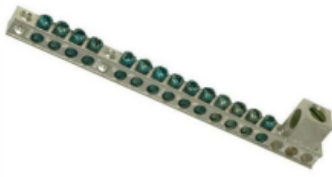


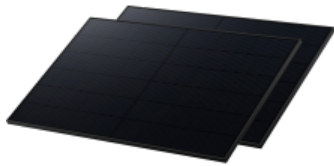
System Composition

1. Which devices can be used together with F3800?

Can be used with these devices:

Product Name		Product Number	Appearance	Functions
Anker SOLIXHome Power Panel Kit	Anker SOLIX Home Power Panel	A17B1		Seamlessly integrates F3800, the grid, and rooftop solar power. Provides backup power for essential home appliances during outages. Gives you the ability to control and monitor energy use with the Anker app. Avoids peak rate charges and optimizes energy consumption. Promotes sustainability and self-sufficiency.
	Subpanel (12-Circuit Backup Load Center)	A17B4		An electric load panel that connects 12 circuits. Backup loads are powered during outages.
	100A Circuit Breaker	A17B4-80		/

	Ground Bar Kit	A17B4-81		/
	Double Power Hub	A17B2		Connect two F3800s via the Home Power Panel ports. Raise your output to 12,000W and gain 120V/240V split-phase power for all appliances.
Backup Kit	Transfer Switch	A17B3		Power your household with F3800 during an outage. Requires manual switching. When F3800 is depleted, disconnect from the transfer switch and recharge using a wall outlet.
	Transfer Switch Cable	A17B3-80		/
Expansion Battery	BP3800 Expansion Battery - 3840Wh LFP	A1790111-85		Expansion Battery

Solar Panel	PS400 Portable Solar Panel	A2437		/
	405W Rigid Solar Panel	A5551		/
Accessories	Car Charging Cable (Male Car Outlet to Female XT60)	A17U5		Male Car Outlet to Female XT60
	XT-60 to MC4 Cable (0.5m/1.6ft)	A24V7011		Recharges from the solar panel.

	MC4 3-Port Solar Charging Connector	A1790111-83		Connects three solar panels with MC4 connectors.
	AC Charging Cable	A1770111-80		Allows you to recharge from a wall outlet.
	BP3800 Expansion Battery Cable	A1790111-92		/

2. What solar panels are compatible with F3800 (US version)?

The solar input supports an 11-60V solar panel with an XT-60 connector.

- For firmware 1.7.8 or earlier: If you use an 11-32V solar panel, the current supports 10A max. If you use a 32-60V solar panel, the current supports 25A max.
- For firmware 2.0.9: If you use an 11-28V solar panel, the current supports 10A max. If you use a 28-60V solar panel, the current supports 27A max.
- For firmware 2.1.1 or later: If you use an 11-15V solar panel, the current supports 10A max. If you use a 15-60V solar panel, the current supports 27A max.

F3800 has two XT-60 ports and each port supports up to 1.2kW, or 2.4kW in total.

3. Can the F3800 be powered by a gas, diesel, or other type of generator?

- F3800 can be powered by a gas generator if it is a pure sine wave generator (THD less than 5%). Adjust the AC input of F3800 via the app. Minimum input is 200W.
- THD (total harmonic distortion) : In the field of power supply, the THD specifically refers to the magnitude of the current.
- If the generator does not produce a pure sine wave, it cannot power F3800 or any other power station.

Home Power panel with F3800

4. Can I use a generator inlet box with Home Power Panel System?

Connecting a generator to the grid may cause charging issues with Home Power Panel. Generator characteristics can lead to voltage and frequency fluctuations with varying loads. These fluctuations might exceed the rated range of Home Power Panel, triggering a protective shutdown and creating charging issues.

- If your generator is high quality and does not exhibit voltage and frequency fluctuations, it should not cause issues with Home Power Panel; however, there is always a risk.

Here is some other advice:

- If your generator produce a pure sine wave, try connecting the generator to the grid during an outage and see if it causes any charging issues with Home Power Panel.
- If you use a generator to power F3800 directly, make sure it produces a pure sine wave.

Transfer Switch with F3800

5. Can I connect the F3800 to the same transfer switch/inlet box I used for my gas generator to backup my home?

F3800 is compatible with your home's transfer switch. Just connect the appropriate voltage cable to the transfer switch.

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

Note that F3800's maximum output is 6000W, including from its 240V/25A port.

Warning: Ensure the neutral and ground wires of the inlet box or transfer switch are properly connected. Missing neutral and ground wires may damage appliances on the circuit. Once properly wired, connect F3800 with the transfer switch via the L14-30 or 14-50 port, then turn on AC power.

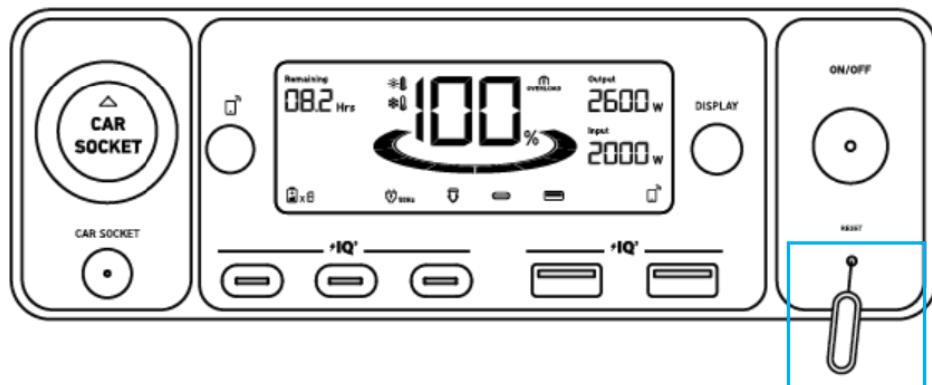
Common Issues

F3800

1. Common Questions

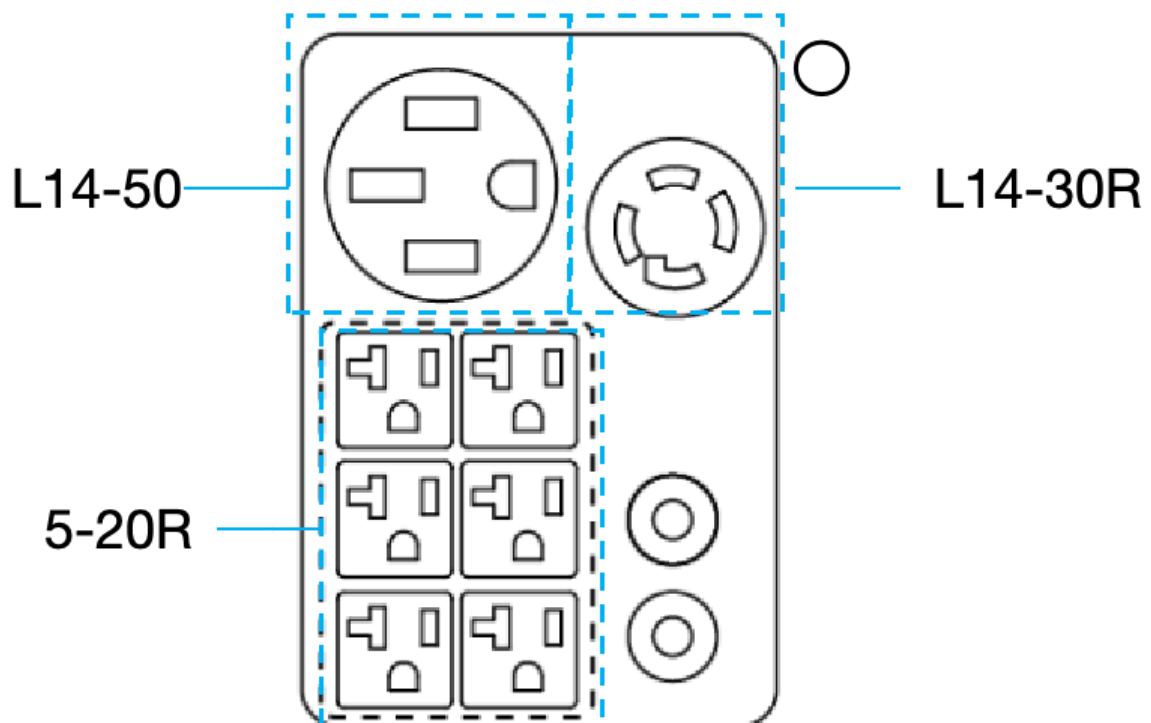
1. How do I reset my Portable Power Station?

If your F3800 Portable Power Station is not working correctly, insert a paper clip or pin into the reset hole for 1 second to factory reset.



2. Is the AC port of the F3800 always powered? Does output automatically shut down? How much power does F3800 lose?

- If you set "Never" under Unit Timeout Settings in the Anker app, F3800 will never shut down. The main control MCU has power and can start charging or discharging at any time. Note this is not for AC output, which cannot be shut down.
- If the load is connected to a 30A or 50A port and the load power is less than 20W, the port will shut down after 15 minutes.
- If the load is connected to a 120V terminal and the load power is less than 20W, smart socket detection will operate as normal.



Output Power	Recognized Device in AC Output Port	Unrecognized Device in AC Output Port	Car Socket		USB-A/USB-C		Main Power Switch
Output Over 20W	Always On (Set shutdown time via Anker app)	Always On	Output Over 3W	Always On	Output Over 90mA	Always On	Stays powered as long as any output port is in use.
Output Under 20W		Shuts Down After 15 Minutes	Output Under 3W	Shuts Down After 5 Hours (Set shutdown time via Anker app)	Output Under 90mA	Shuts down automatically after 2 hours and enters Sleep mode if no load is detected. Plug-and-play use.	If all output ports are in Sleep mode, MCU enters Sleep mode.
If the main switch is activated and the AC smart socket automatically shuts down, the AC icon will turn gray. You will need to restart AC output by pressing the AC outlet button.			If the main switch is activated and the car socket automatically shuts down, the car charger icon will turn gray. You will need to restart DC output by pressing the car socket button. The car socket button can wake up the USB-A port simultaneously to prevent plug-and-play failure.		Activates automatically if main switch is turned on. Plug-and-play use.		By default, MCU sleep lasts 12 hours. After this, the device automatically shuts down, and the portable power station will not charge. Adjust the standby and shutdown time in the Anker app. Options: 30 minutes 1 hour 2 hours 4 hours 6 hours 12 hours 24 hours Never
Note that your time setting on the Anker app is prioritized over the automatic shutdown logic of AC smart sockets or the car socket.							

Note: The screen will not display AC output power if AC port wattage is lower than 15W.

When F3800's AC port is activated, **F3800's** internal inverter operates and uses approximately 60W to 70W. The smaller the device load, the lower AC efficiency will be.

3. How does F3800 work?

1. F3800 can be used as a battery and charges devices via the AC output ports. Add expansion batteries for more capacity. Each expansion battery has 3840Wh, and each F3800 can connect up to 6 expansion batteries.
 2. Once F3800 is fully discharged, you'll need to disconnect it from the transfer switch and recharge it using a wall outlet.
 3. F3800 Home Power Kit allows you to integrate the F3800 into your home power system. With the home power panel, the F3800 can be charged using rooftop solar panel system, or it can be charged during off-peak hours and then used to power your home during peak hours.
- If a blackout occurs, F3800 automatically powers backup loads via the Backup Load Center. The Backup Load Center that comes with Home Power Panel Kit supports up to 12 circuits.

Due to anti-islanding requirements, all grid-tie solar inverters must stop feeding power to the grid during an outage. Therefore, if grid power is down, your grid-tied solar array will not charge F3800 via Home Power Panel. (If you don't have a grid-tied solar array, do not use a 100A solar CT.)

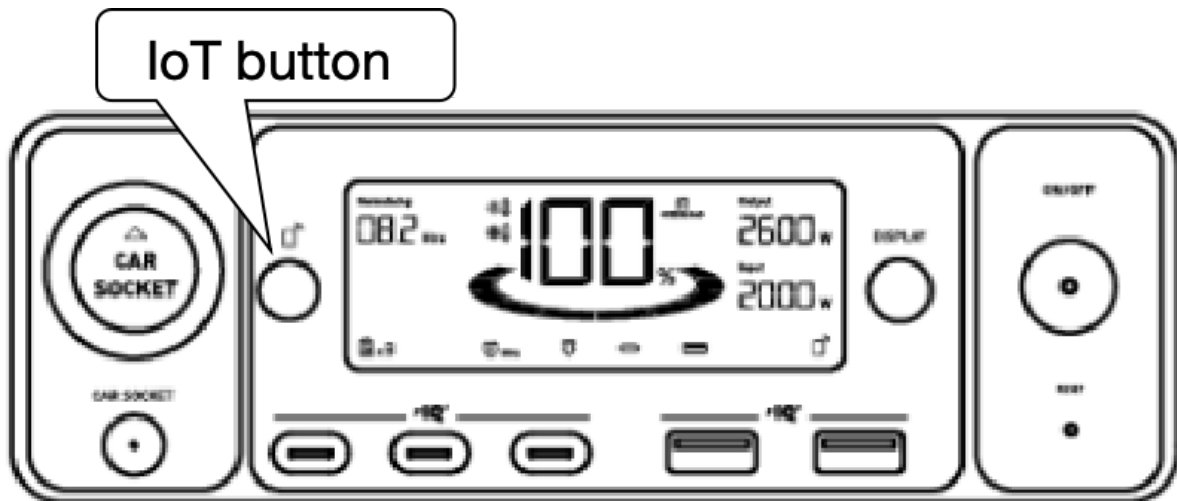
When the grid functions normally, you use home appliances as normal with Home Power Panel. The only difference is that solar energy, the grid, and F3800 will power your devices based on the mode you select in the app, ultimately helping you lower energy bills. Devices connected to the Backup Load Center (subpanel) should not exceed 25A (one F3800) or 50A (two F3800s).

- If an outage occurs, F3800 will supply power devices connected to the Backup Load Center (subpanel). At this time, one F3800 can output 25A (240V=25A or 120V=25A per phase), and two F3800s can output 50A (240V=50A or 120V=50A per phase).

Typically, devices connected to the Backup Load Center (subpanel) are essential during an outage. We do not recommend connecting high-powered devices to the Backup Load Center (subpanel) because it can quickly deplete stored power in F3800.

4. Why does F3800 automatically turn off?

When the battery level of F3800 drops to 1% or lower, F3800 automatically turns off. Charge via a solar panel or wall outlet to increase battery level to 2%, press the F3800 IoT button, and then reactivate via Wi-Fi to resume AC output.



5. Why did F3800 shut down?

F3800 may have overloaded its capacity. Please check the following conditions:

- If the output load rate is less than 105%, it can operate normally.
 - If the output load rate is between 105% and 120%, it will shut off after 1 minute.
 - If the output load rate is between 120% and 150%, it will shut off after 10 seconds.
 - If the output load rate is between 150% and 170%, it will shut off after 5 seconds.
 - If the output load rate exceeds 170%, it will shut off after 1 second. (Note: There is a peak current limit of 80A.)
6. What is the SOC (battery level) of F3800 before shipment/transporting? Does F3800 need to be charged before first use?

If shipping by air, the SOC is 20 to 30%. If shipping by sea, the SOC is over 80%. Before using F3800 for the first time, you need to charge it to activate it. Once activated, unplug the AC cable, and power F3800 on or off as needed.

7. Why does F3800 lose power even when no devices are connected and the AC switch is turned off?

This is normal because F3800 itself consumes some power while operating, even with the AC switch off. It uses about 20-30Wh per hour, which totals approximately 480-720Wh over 24 hours. This results in an 18% daily loss, or about 691Wh. To avoid this self-consumption, we recommend turning off F3800 when not in use.

8. How do I use the 240V ports on F3800?

When using the L14-30R or 14-50 AC output ports to power EV chargers or other appliances, double tap the AC outlet button to turn on AC power. After double tapping, you'll see a car icon on the screen. This is when you can connect your EV charger to the L14-30R or 14-50 AC output ports.

9. How should my electrical device be grounded when connecting to F3800?

The 120V outlets on F3800 are not grounded when the unit is disconnected from the wall outlet. If your electrical devices require grounding, purchase a grounding adapter and plug it into one of the 120V.

While disconnected from a wall outlet, press the AC button twice to switch the 240V to EV mode. Both 240V outlets become grounded, and you can plug any electrical devices that require grounding safely into these ports.

When F3800 is connected to a wall outlet (UPS mode), the 120V outlets are grounded through your home's electrical grid.

10. How should I store and maintain the Portable Power Station?

When storing F3800 Portable Power Station, make sure you:

- Turn off the main power button.
- Store F3800 in a dry and cool environment.
- Check the remaining battery capacity each week. If the battery level is below 30%, fully charge F3800. We also recommend to charge the battery to 100% every three months, discharge it completely, and then charge it to between 50 to 80%.

Note:

F3800 Portable Power Station can be placed horizontally or vertically.

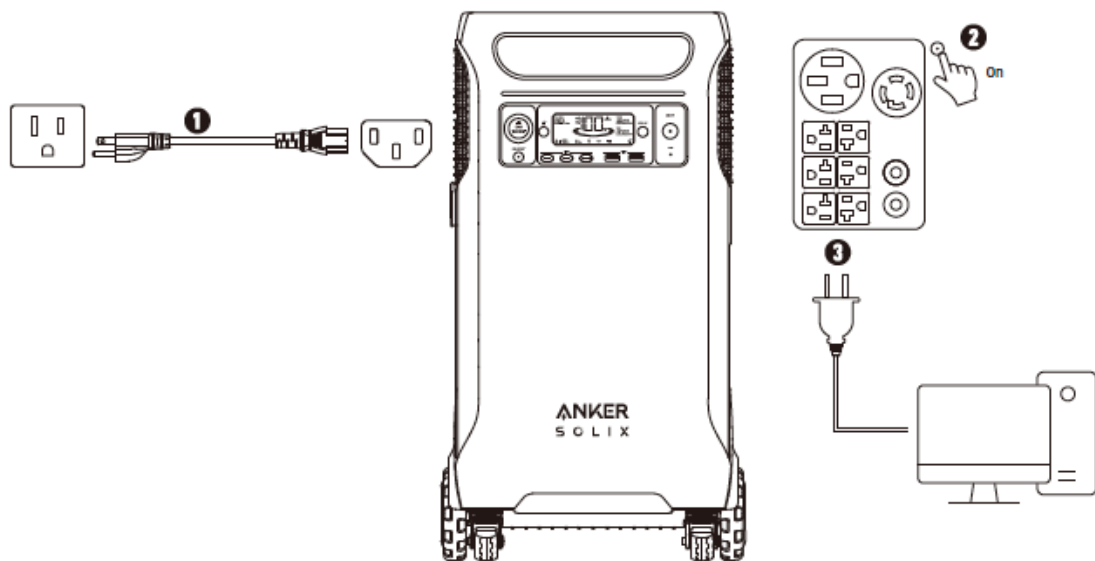
11. Is F3800 waterproof? Is its protective cover waterproof? Can I place F3800 outdoors?

Neither F3800 nor the protective cover is waterproof. The protective cover is only dustproof. We recommend installing F3800 indoors.

2. UPS Mode

1. How do I use UPS mode?

To use UPS, connect F3800 Portable Power Station to a wall outlet with the AC charging cable, press the AC outlet button, then connect devices via the UPS AC output ports.



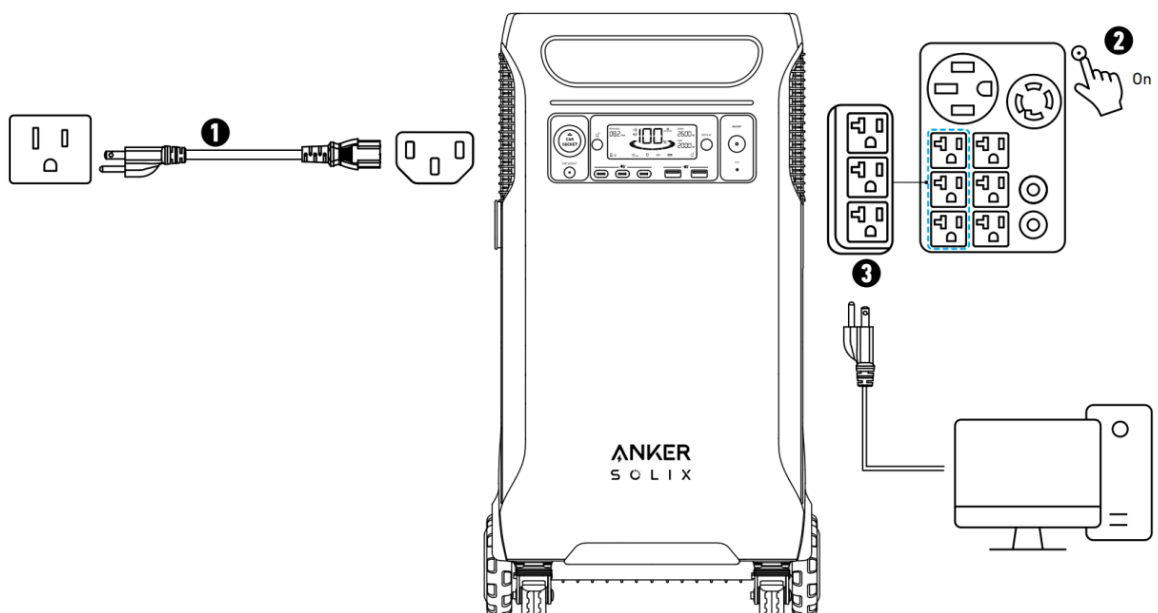
2. What is the UPS output limit?

United States: 1440W

3. Do the 240V ports of F3800 (US version) work in UPS mode?

Only the three 120V ports labeled UPS are functional in UPS mode.

To use UPS, connect F3800 Portable Power Station to a wall outlet with the AC charging cable, press the AC outlet button, then connect your devices via the UPS AC output ports.



Here are some other important notes regarding F3800 while its in UPS mode:

- When F3800 is plugged into a wall outlet and simultaneously charging a device through its AC output port, it supports bypass charging at 1440W (120V~12A).
- Because US wall outlets provide 120V, connected devices receive power directly from the wall outlet, bypassing F3800's internal circuits. This is by design and complies with UL UPS regulations. It's also the reason why the 240V do not activate in UPS mode.
- If F3800 is charged via the XT-60 port with an 11 to 60V input, all AC output ports, including the 240V port, work.

3. Bluetooth Connection

4. What should I do if I cannot connect F3800 to the app via Bluetooth?

If you're unable to connect F3800 to the Anker app via Bluetooth, try removing F3800 from the app, then unpair by holding the IoT button on F3800 for over 7 seconds. Next, press the IoT button once more and attempt to search for F3800 via the app. Reconnect F3800 to see if the issue persists.

If the issue still persists:

1. Use another phone to record a short video showing the issue and send it to us.
2. Upload the logs so we can analyze them.

In your correspondence, make sure you include the following:

1. Shipping address.
2. Order number.
3. Serial number on the back of F3800.

5. 30% Tax Credit/Residential Clean Energy Credits

1. Does F3800 support residential clean energy credits?

This is not information we can specifically answer. We encourage you to do your own research and consult with a tax advisor regarding your specific situation and whether you can apply any tax credits, deductions, or similar benefits.

There is limited published guidance from the Internal Revenue Service about the details of what may constitute a battery storage technology expenditure or what it means for battery storage technology to be installed in connection with a home.

The Residential Clean Energy Credit defines a "qualified battery storage technology expenditure" as an expense for battery storage technology with at least 3kWh capacity and is installed in connection with a dwelling in the US and is used as your residence.

Double Power Hub

1. How to connect two F3800s ?

Connect two F3800s with Double Power Hub for 12kW of output.

F3800 Backup Kit comes with a transfer switch. Connect F3800 to this switch so you can access backup power for appliances during an outage. This will need to be done manually.

Home Power Panel with F3800

1. Common questions

1. Why did Anker SOLIX Home Power Panel shut down?

It's possible your Home Power Panel experienced excessive amperage.

- Input current below 55A: Safe for long-term use.
- Input current between 55A and 75A: Protective shutdown occurs after 2 minutes.
- Input current between 75A and 100A: Protective shutdown occurs after 1 minute.
- Input current exceeds 100A: Protective shutdown occurs after 10 seconds.

When a protective shutdown occurs, F3800 does not output power. To reset, disconnect F3800 from Home Power Panel and then turn the On/Off button back to on.

2. How can I charge F3800 with the grid when electricity prices are lower at night and when it's connected to Home Power Panel?

First, choose Time Of Use mode. You'll see a few sub-modes:

- Super Off-Peak allows the grid to charge F3800.
- Off-Peak allows F3800 to discharge to 80%, then charge F3800 to 80% if it falls below this threshold.
- Peak and Mid-Peak allow F3800 to discharge to the level you set in the Anker app for a daily cycle.

We recommend Super Off-Peak and don't recommend Off-Peak. If you use Off-Peak, F3800 will discharge to 80% and discharge even more during Peak and Mid-Peak periods.

Learn more about Time Of Use mode in the following link:

<https://support.anker.com/s/article/How-does-the-Time-of-Use-Mode-Work>

3. What is the difference between Self-Consumption and Time Of Use modes?

1. Self-Consumption Mode

Maximize the use of photovoltaic energy and reduce grid power consumption. Essentially, use the grid as little as possible.

Load Power Source Priority: Photovoltaic > F3800 > Grid

The priority for photovoltaic power supply is first to any loads. Surplus energy is then diverted to charge F3800. Any remaining excess is sold back to the grid.

This mode ensures F3800 is charged exclusively by photovoltaic sources.

2. Time Of Use Mode:

In this mode, you can choose from four time periods that determine charging/discharging:

- Super Off-Peak allows the grid to charge F3800 to 100%.
- Off-Peak allows F3800 to discharge to 80%. The grid charges F3800 to 80% if it falls below that threshold.
- Peak and Mid-Peak instruct F3800 to discharge to the battery level you set in the app for a daily cycle.

Load Power Source Priority: Photovoltaic > Grid > F3800

The priority for photovoltaic power supply is first to energy storage systems. Excess power is delivered to loads. Any remaining excess is sold back to the grid.

The charging source for F3800 is both photovoltaic and the grid.

4. Why is the power of F3800 only 1.9kW when connected to Home Power Panel when there is grid power?

To preserve battery life, discharge rate is limited when connected to the grid, even though F3800 has a rated capacity of 6kW. This precaution ensures long-term use and efficient system performance over time.

When connected to the grid, one F3800 connected to Home Power Panel can deliver approximately 1.92kW to the load. With two F3800s connected to Home Power Panel, approximately 3.8kW is delivered to loads. If you add more than three expansion batteries to Home Power Panel, the maximum combined output can reach up to 6kW.

If an outage occurs, F3800 provides a maximum output of 6kW through Home Power Panel. With two F3800s, the maximum output rises to 12kW through Home Power Panel.

5. When using Home Power Panel, can I set it to neither charge nor discharge during a specific period?

Home Power Panel is not currently capable of neither charging or discharging.

3. Installation

1. Is there an installation service for Anker SOLIX Home Power Panel?

We do not have a qualified installer list for Anker SOLIX Home Power Panel. Please refer to the attached installation manual and video: https://www.youtube.com/watch?v=ZvrcvnA_gEo
If you have a rooftop solar panel system at home, we recommend you find an electrician who is familiar with both photovoltaic systems and household electrical circuits.

4. Certification

1. Does Anker SOLIX Home Power Panel support UL certification ?

Our Anker SOLIX Home Power Panel supports UL 1741 and UL 1741 CRD-PCS.

12-Circuit Backup Load Center (Subpanel)

1. Specification

1. What are the recommended 100A circuit breaker brands?

The recommended brand of the 100A breaker is Eaton.

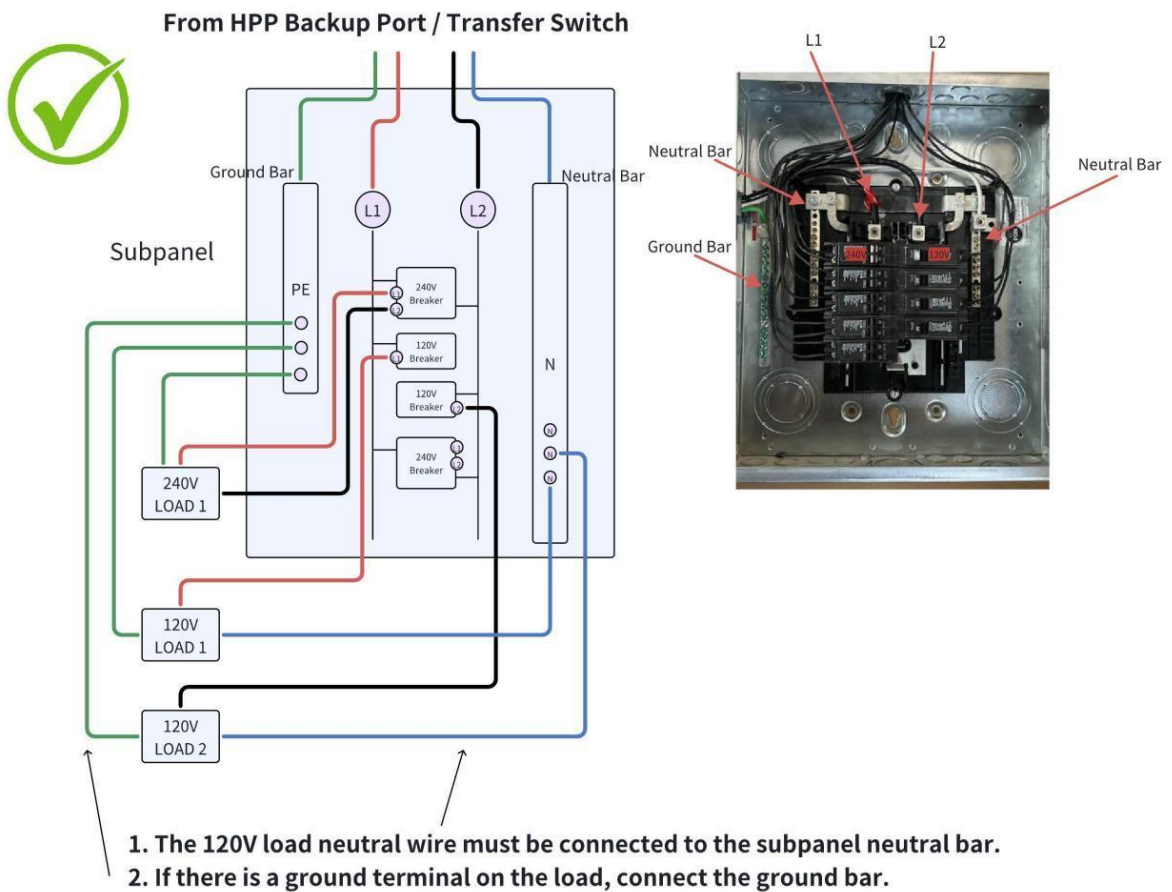
2. Installation

1. How do I connect the subpanel and Home Power Panel?

Here are some steps and diagrams to help you connect them.

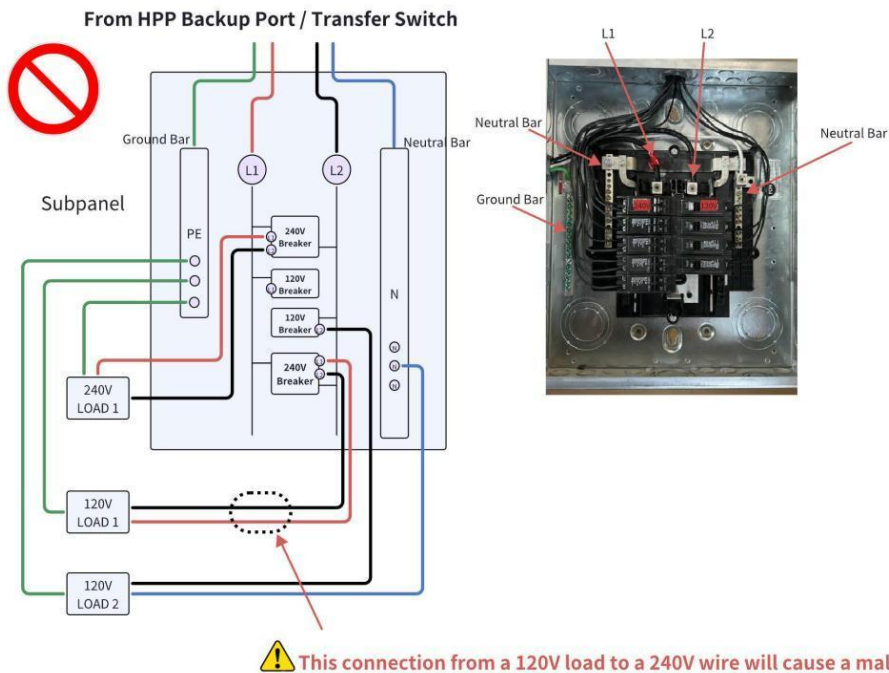
Warning: Before connecting F3800 to a transfer switch or subpanel with an inlet box, confirm the wires inside the transfer switch or subpanel are properly connected. A wrong wire connection may damage appliances on the circuit.

Correct Subpanel Connection:

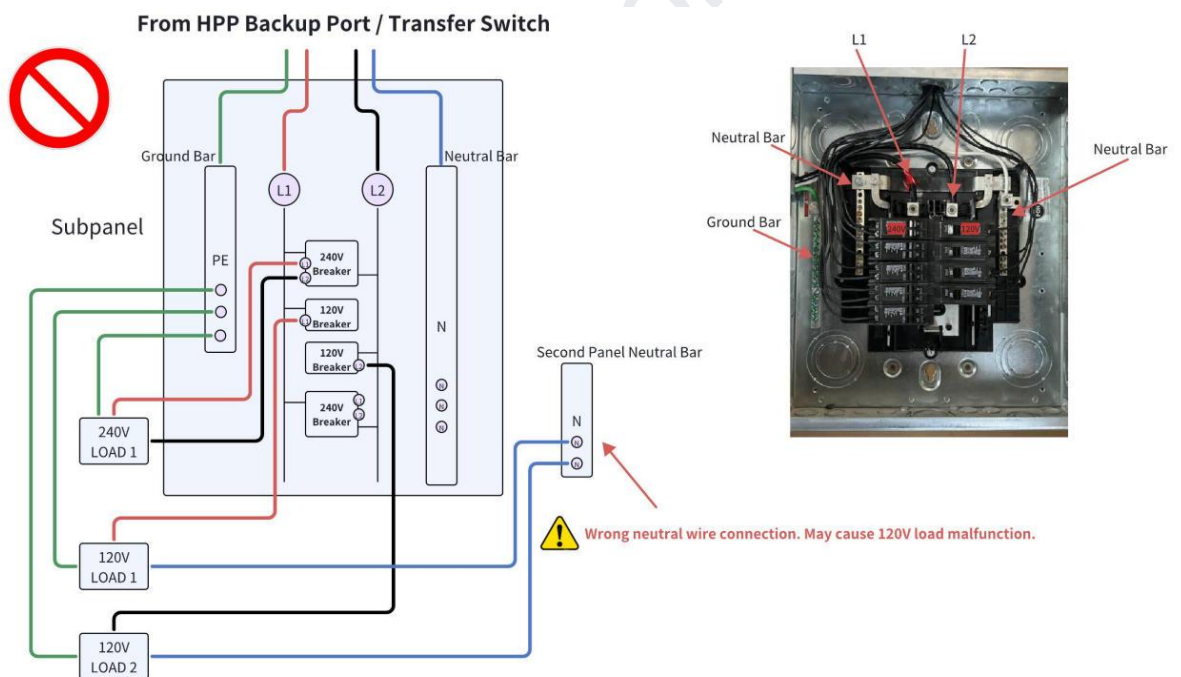


Incorrect Subpanel Connection:

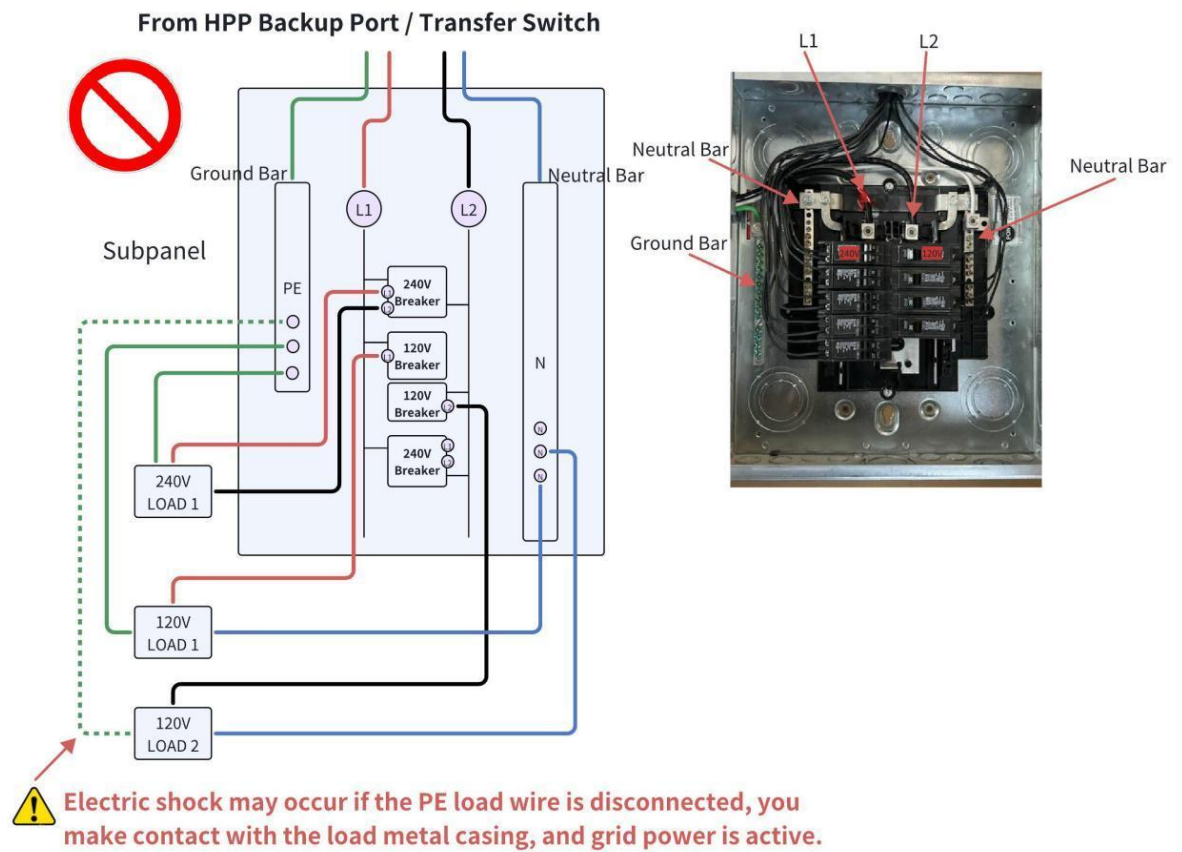
1. This is an example of incorrectly connecting the 120V load wire to a 240V wire.



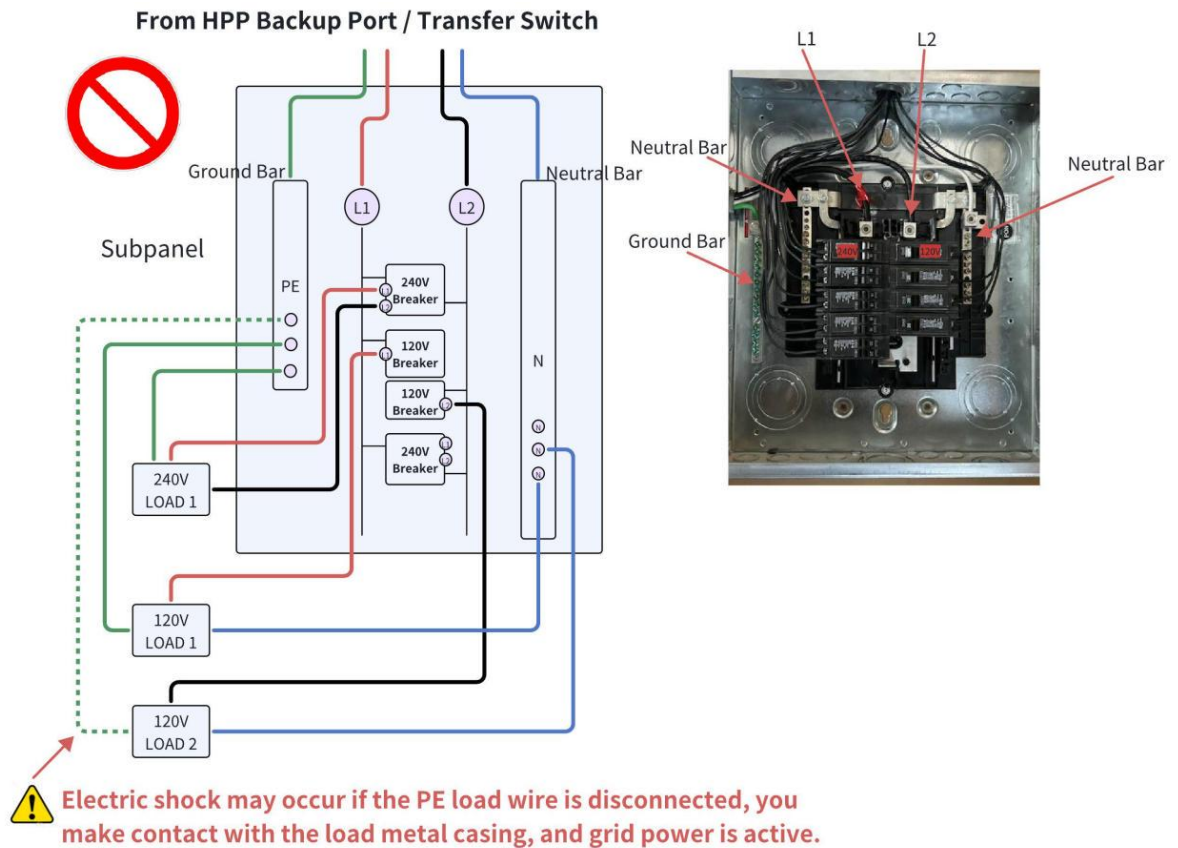
2. This is an example of incorrectly connecting the neutral wire.



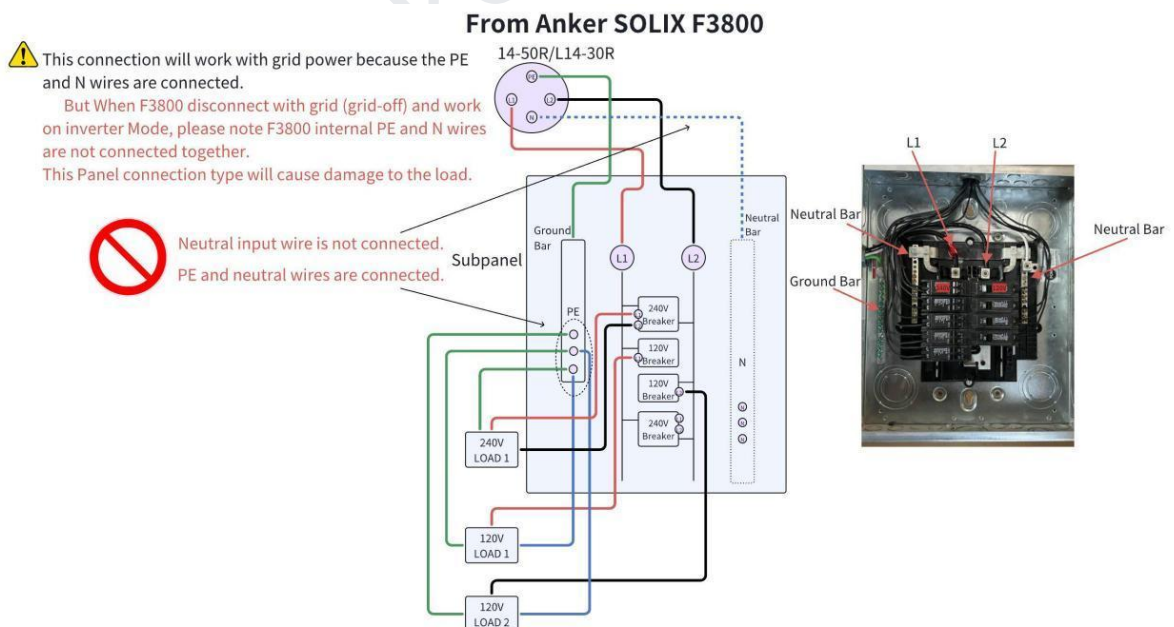
3. This is an example of a subpanel load where the PE wiring has disconnected.



4. This is an example of an incorrect connection, when the PE and N wires are reversed in the subpanel.

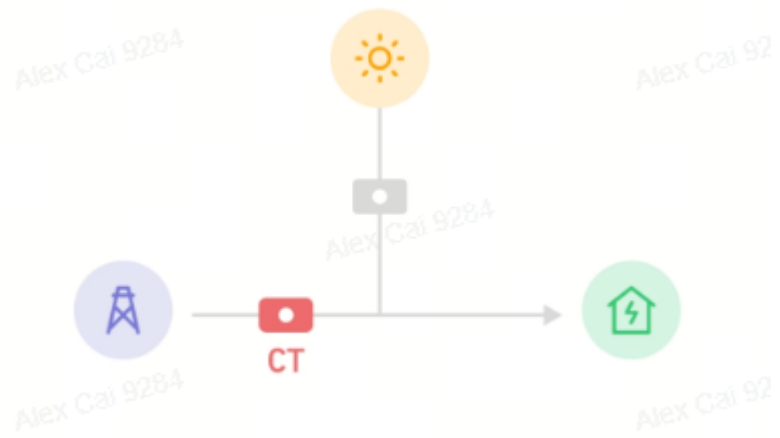


5. This is an incorrect example where the neutral input is disconnected in the subpanel.

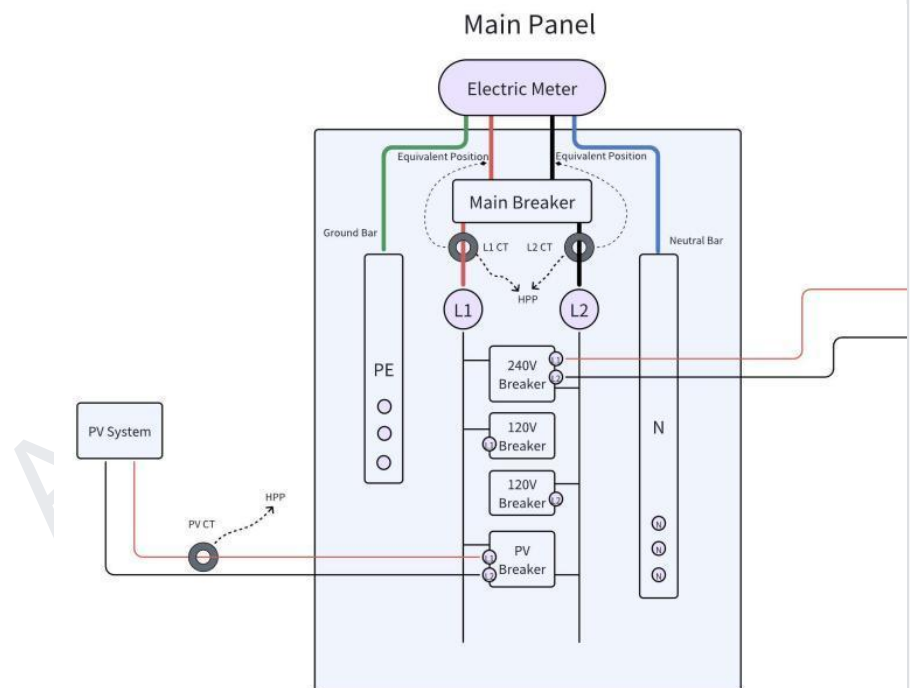


2. How do I Install the Home Power Panel Current Transformers
- Type 1:

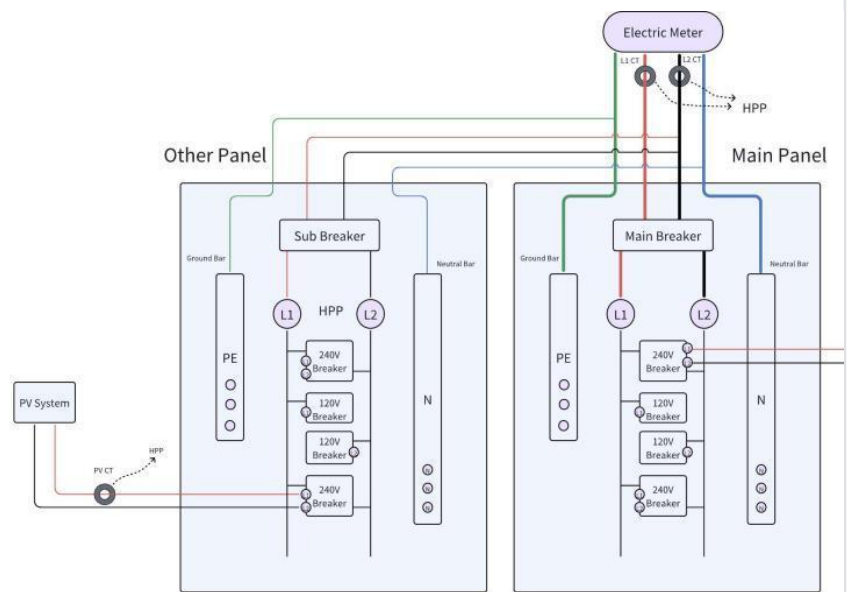
App Method



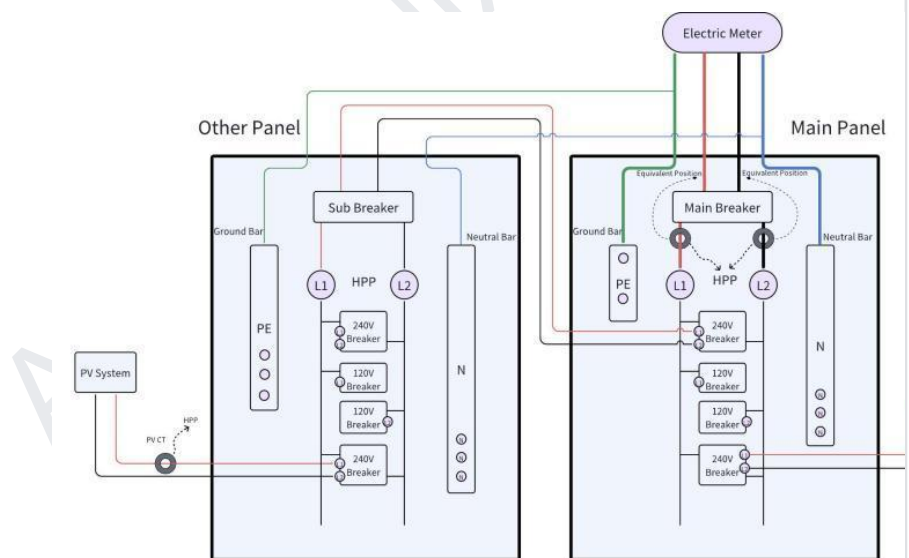
CT Method 1



CT Method 2

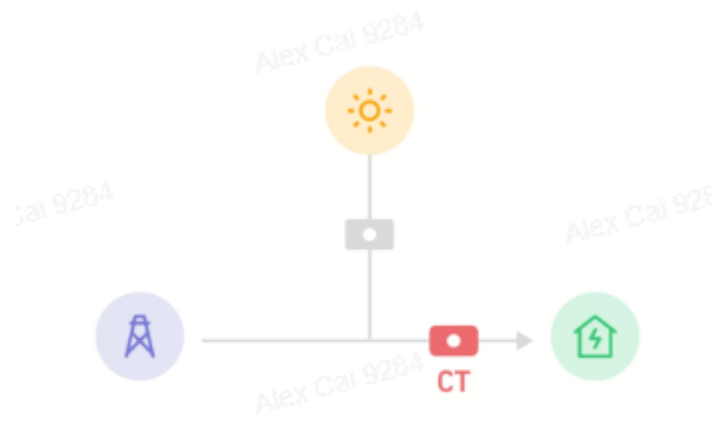


CT Method 3

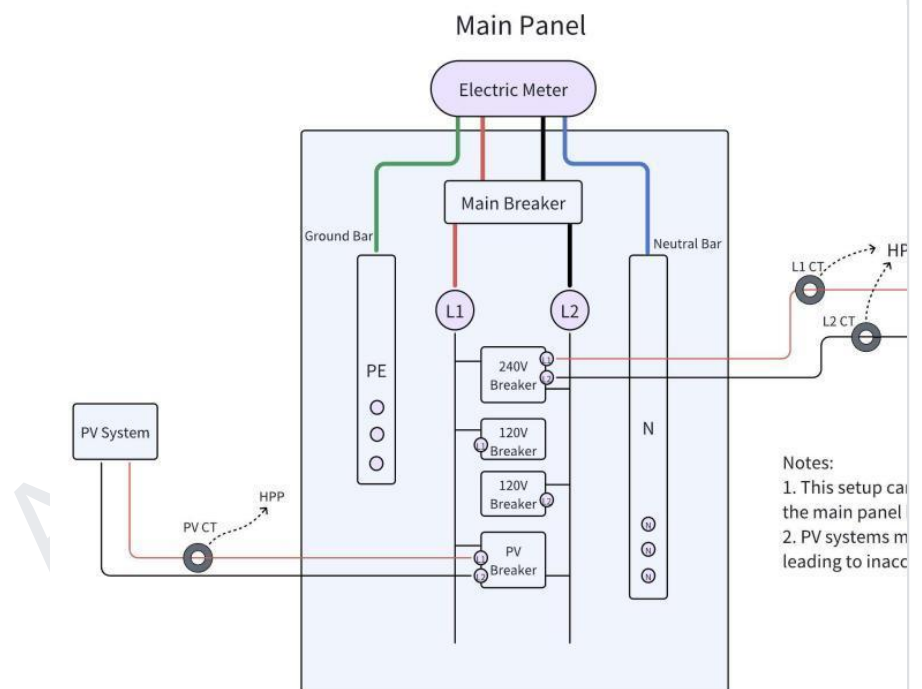


- Type 2:

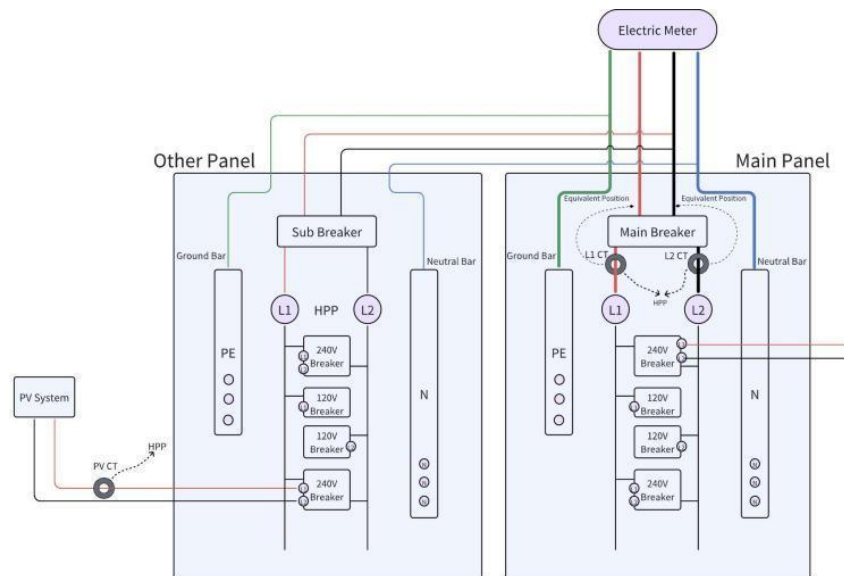
App Method



CT Method 1



CT Method 2



Notes:

1. This setup cannot detect status of other loads on the subpanel by Home Power Panel.
2. PV systems may send power to undetected loads leading to inaccurate calculations.

Transfer Switch with F3800

1. Specifications

1. Which manual transfer switch brand does Anker SOLIX use?

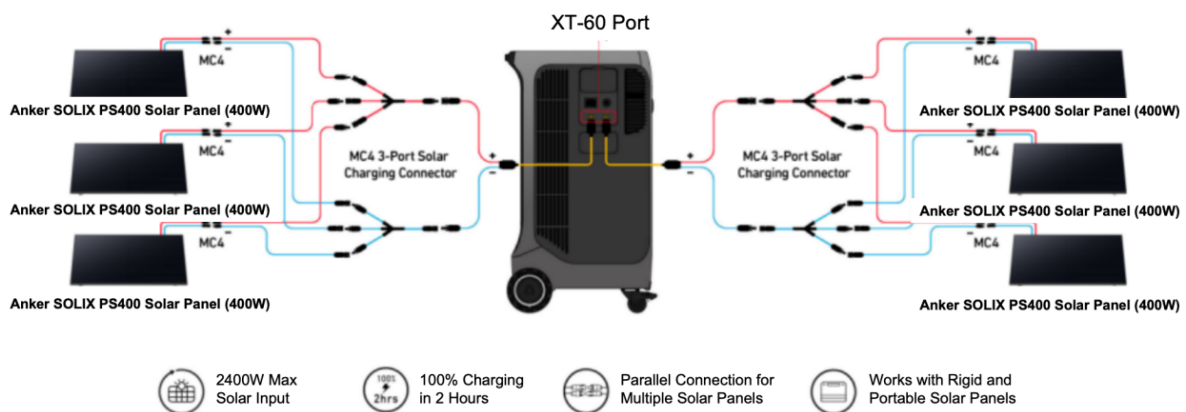
We use Reliance Controls. The specific model in the 10-circuit transfer switch included in Anker SOLIX Power Backup Kit is Reliance Controls A510A.

2. Installation

1. How do I connect the transfer switch?

Please refer to the diagram below.

Warning: Before connecting F3800 to a transfer switch or subpanel with an inlet box, make sure the wires inside the transfer switch or subpanel are properly connected. Incorrect wiring may damage appliances on the circuit.



Notes:

Each XT-60 port on F3800 can be connected with up to three Anker SOLIX PS400 Solar Panels (400W, 8.33A). You must use an MC4 3-port solar charging connector, which supports a maximum solar input of 1200W. With both XT-60 ports and six 400W solar panels, you can reach a maximum solar input of 2400W.

When connecting 405W rigid solar panels, determine the number of panels that can be connected in parallel based on their current.

For example, we recommend each XT-60 port on F3800 be connected with up to two 405W rigid solar panels (Pmax current: 12.99A). Because the current from three solar panels exceeds 27A and F3800 cannot handle excess energy, we recommend to connect only two 405W solar panels. You can use two ports of the MC4 3-port solar charging connector. With both XT-60 ports and four 405W solar panels, you cannot reach a maximum solar input of 2400W and can only achieve about 1600W solar input.

F3800 works with rigid and portable solar panels, as long as the voltage per panel doesn't exceed 60V. You must also have the necessary accessories (e.g., MC4 3-port solar charging connector, solar charging cables, or MC4 extension cables). Two MC4 3-port solar charging connectors are included with F3800. Required accessories may vary depending on the brand and model of your solar panels.

To avoid usage issues, make sure the solar panel connection to each XT-60 interface is identical in terms of model, capacity, voltage, and other relevant characteristics.

Anker App

1. How do I upload logs via the Anker app?

- Click Profile in the bottom right corner of the Anker app home page.
- Go to Settings and select Upload Log.
- Choose upload app logs or device logs.
- Note: You can only upload device logs for devices that support Wi-Fi connection and must be connected to Wi-Fi before uploading.

User Guide

F3800

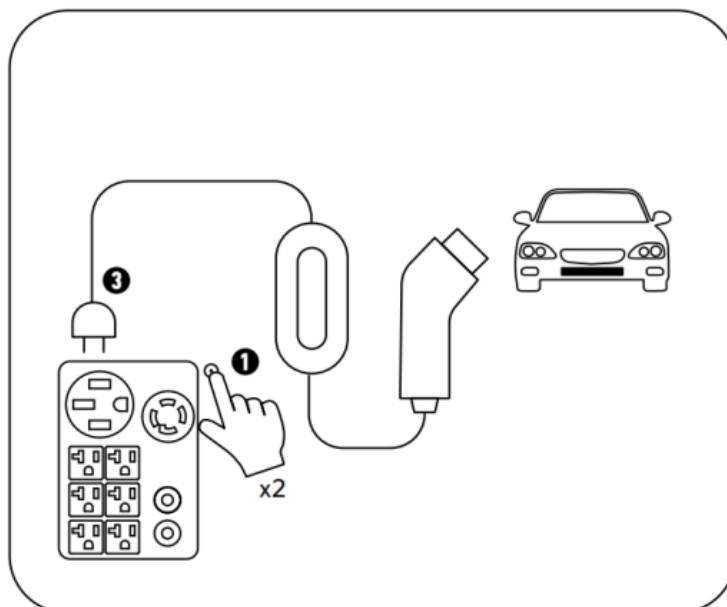
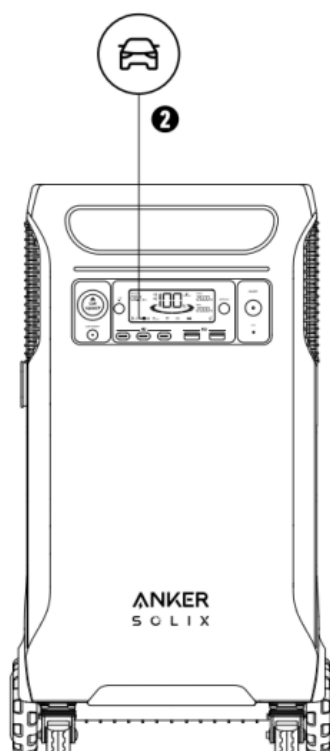
1. Discharging

1. How can I calculate how long F3800 can power a device?

- F3800 has 1200Ah battery capacity, which is converted from 3840Wh and can provide 6000W AC output.
- Charging a device with F3800 will also result in power loss due to the internal inverter's operation (approximately 60 to 70W). The smaller the device load, the lower the AC efficiency will be.
- Generally, if a connected device exceeds 300W, AC output efficiency will be between 80 to 90%. The larger the connected device's power, the closer AC output efficiency is to 90%.
- You can use the following formula to generally calculate how long F3800 can last when powering a device over 300W.
- $3840\text{Wh} \times (80\% \text{ or } 90\%) / \text{Device Wattage} = \text{last hours}$

2. How do I recharge EVs via F3800's 240V ports?

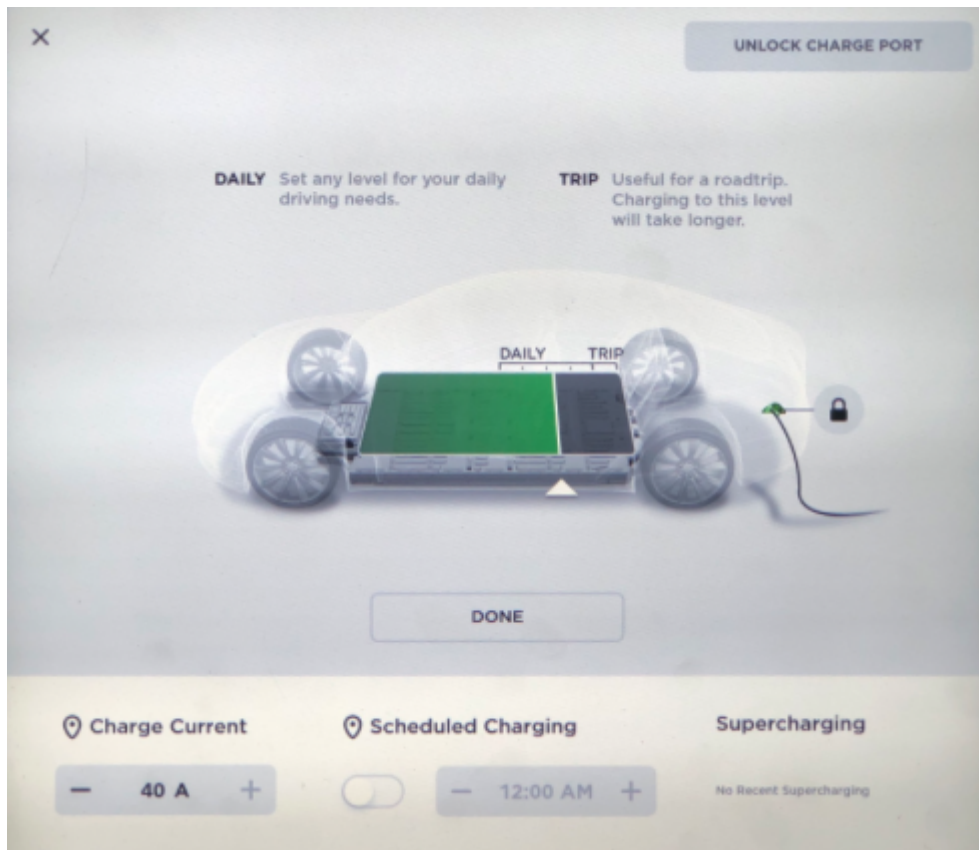
- Set the charge current to 25A or less on your EV settings or EV charger. F3800 does not support more than 25A charging current.
- To start charging your EV, double press the AC button to activate EV charging. A car icon will appear. If you don't see it, double press the AC button again. Then plug in your EV charger into F3800's 14-50 port and connect your EV charger to your EV. You should notice charging begin immediately.



Notes:

For Tesla users, Tesla EV's default rated charge current is 32A. Here is a quick guide to changing the charge current:

- On your Tesla's Time Of Use screen, click on Settings.
- Select Charging from the menu.
- Adjust Charge Current.



2. What is the discharge logic of the battery pack?

Note: If the battery levels of two expansion batteries differ significantly, we recommend charging them to similar levels before connecting them. Otherwise, it may cause the batteries to malfunction.

- Overall Logic: Balance all battery levels at the fastest speed. After balancing, all batteries charge and discharge simultaneously.
 - When stationary, the battery with the highest charge charges the battery with the lowest charge. When the charge levels are equal, the batteries stop charging and discharging.
 - During discharge, the battery with the highest charge is prioritized for release. When the charge level of the battery is the same as the lowest-charged battery, both batteries output simultaneously.
 - During charging, all battery packs charge simultaneously until their charge levels are the same.
3. What should I do after F3800 not being used for a long time?
- If F3800 Portable Power Station is stored at low capacity for a long time, lithium batteries will self-consume power, which may

lead to a quick discharge. This often leads to poor conductivity and a reduced battery lifespan that causes the battery to not work.

4. Why isn't BP3800 Expansion Battery working?
 - First, confirm F3800 has been upgraded to the latest firmware.
 - Next, disconnect **BP3800** Expansion Battery from **F3800**, then reconnect.
 - If you have two or more expansion batteries, try using another cable to connect them.

2. Charging

1. Can F3800 recharge using both a wall outlet and MPPT simultaneously?
 - F3800 supports simultaneous recharging using both a wall outlet and MPPT, with priority given to MPPT recharging power.
 - Specifically, when both a wall outlet and MPPT are connected, the system will first maximize MPPT recharging power, and then supplement the remaining recharging needs from the wall outlet.
2. Why is the charging power only around 680W at low temperatures?
 - This is normal due to battery cell characteristics. When cell temperature is below 10°C (50°F), charging current is restricted.
 - Please allow the power station to charge until cell temperatures reach at least 10°C. When this occurs, charging power can reach its maximum capacity. Connect to the Anker app to check battery temperatures.
3. Can rooftop solar panels charge F3800 during a power outage?
 - Rooftop solar panels cannot charge F3800 via Home Power Panel during an outage. You can try directly connecting your solar panels.
 - If your rooftop solar array outputs less than 60V during an outage, try to disconnect the rooftop solar array from the inverter and connect to **F3800** via the XT-60 ports. If your rooftop solar array outputs more than 60V, it cannot be used to power **F3800** directly.
 - **F3800** is compatible with any 11 to 60V panel with an XT-60 connector. Each XT-60 port accepts a maximum current of 27A and up to 1200W (total 2400W with two XT-60 ports).
 - Note dual MPPT charging is not possible with the same input source due to same-source protection on dual MPPT inputs. Please use different sources for dual MPPT charging.
4. Why don't the DC/XT-60 ports work? Why doesn't F3800 receive solar input?
 - Sorry to hear you're having trouble getting your DC/XT-60 ports on F3800 to receive solar input. Let's troubleshoot.

- Check the output voltage and current from the solar panels. Only 11 to 60V panels work with **F3800** via the XT-60 ports.
- If you have multiple solar panels connected to **F3800**, test each solar panel to see it's working.
- Update the firmware to the latest version, then test your solar panels again.
- If none of these work, please ask us to send you a free car charging cable to test the XT-60 ports. Once received, connect the car charging cable to a 12V car port. You should see 120W being delivered to **F3800** via the XT-60 port.

5. Why can't solar panels fully output to F3800?

- First, update F3800 to the latest version, then test your solar panels again.
- If you have more than one solar panel for F3800, try to recharge F3800 with each solar panel and see if each panel works.
- If none of these work, then these environmental factors could be impacting output:
 - Light Intensity:

The amount of light reaching the panel causes output fluctuations. You'll notice that output is closer to its maximum value with a clear, midday sun compared to the morning or late afternoon. Fog, clouds, and rain can also lower output.

- Surface Temperature:

The temperature of the solar panel surface affects the amount of electricity generated. The cooler the panel surface temperature, the more power it generates.

For example, it is normal for solar panels to produce more electricity in winter than in summer. Solar panel temperatures in summer are typically close to 60°C (140°F). Despite higher light intensity on the panel, nominal power is reduced by at least 10%.

Also note that when sunlight is strong, initial output is higher, but decreases by at least 10% as the panel heats up.

- Sunlight Angle:

For best results in optimal lighting, the panel surface should be perpendicular to the sun's rays. Note that a $\pm 10^\circ$ difference between 90° sunlight and the solar panel has minimal impact on power. The best angle may vary depending on your location and time of year.

- Panels in Shade:

The solar panel surface should not be blocked. Shadows, foreign objects, and even shade from glass can significantly reduce power output.

- If the solutions or environmental information did not solve your problem, please provide the following information:
 - Photos of the solar panel from various angles.
 - Duration of sunlight exposure before measuring power output.
 - If the solar panel feels hot when operating at higher power output.
 - If you are using an extension cable, specify the length of the cable between F3800 and the solar panels, and whether the output improves without using an extension cable.
 - A short video showing how you use the solar panels to power F3800.
- 6. Can I charge an expansion battery directly from the grid?
 - An expansion battery can not be recharged by the grid directly; it has to be connected to F3800 to recharge.
 - Note that when an expansion battery is connected to F3800, we consider them a single unit, not two separate entities. They will charge and discharge simultaneously.
- 7. Why is F3800 charging slowly?

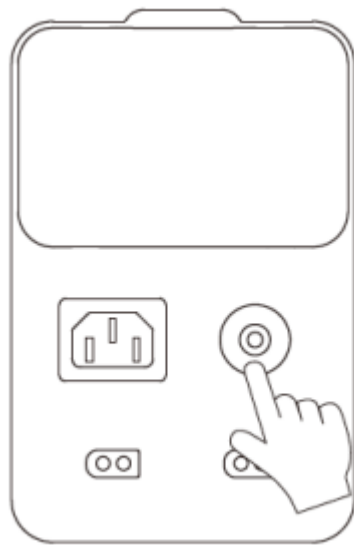
Please use the mobile app to check the battery cell temperature. Charging speeds may be slower if the temperature is below 10°C (50°F). Once the temperature rises above 10°C, you should notice faster charging speeds.

- 8. Can USB-C ports charge F3800 (input only), or are they output only?

The USB-C ports support output only.

- 9. What should I do if F3800's AC output port fails? / What should I do if F3800 can't recharge via AC?

If AC recharging does not work, check if the overload protection switch is turned on. If it is on, press to reset and then continue recharging.



10. What should I do if F3800's USB-C/USB-A port doesn't work?

If your USB-C/USB-A port isn't working, try the following:

- Use another mobile phone to connect to the USB port.
- Test charging with another cable.
- If none of these work, record a short video of the problem and send it to us to diagnose.

3. Wi-Fi Connection

1. What should I do if I cannot connect F3800 to the Anker app via Wi-Fi?

- If you cannot connect F3800 to the Anker app via Wi-Fi, try your phone's 2.4G hotspot without using a router. If you were able to connect, the issue may be the Wi-Fi connection. You can try the following steps to solve the problem:
 - Check that you are connected to a 2.4GHz Wi-Fi network, not a 5GHz network.
 - Confirm the Wi-Fi username and password have been entered correctly.
 - Ensure you log in with the correct region and that it matches your registered region.
 - Check the distance between your router and F3800. Relocate F3800 to within 10m (33ft) of the router and ensure few obstacles and walls are between them for a stronger Wi-Fi signal. You can also add repeaters to enhance the signal.
 - Try removing F3800 from the app, then unpairing it by pressing the IoT button on F3800 for more than 7 seconds. Next, search for and reconnect F3800 to see if the issue persists.
- If the issue still persists:
 - Please share the model of your router, the phone model, and the app version.
 - Share the serial number (SN xxxx) on the back of F3800.

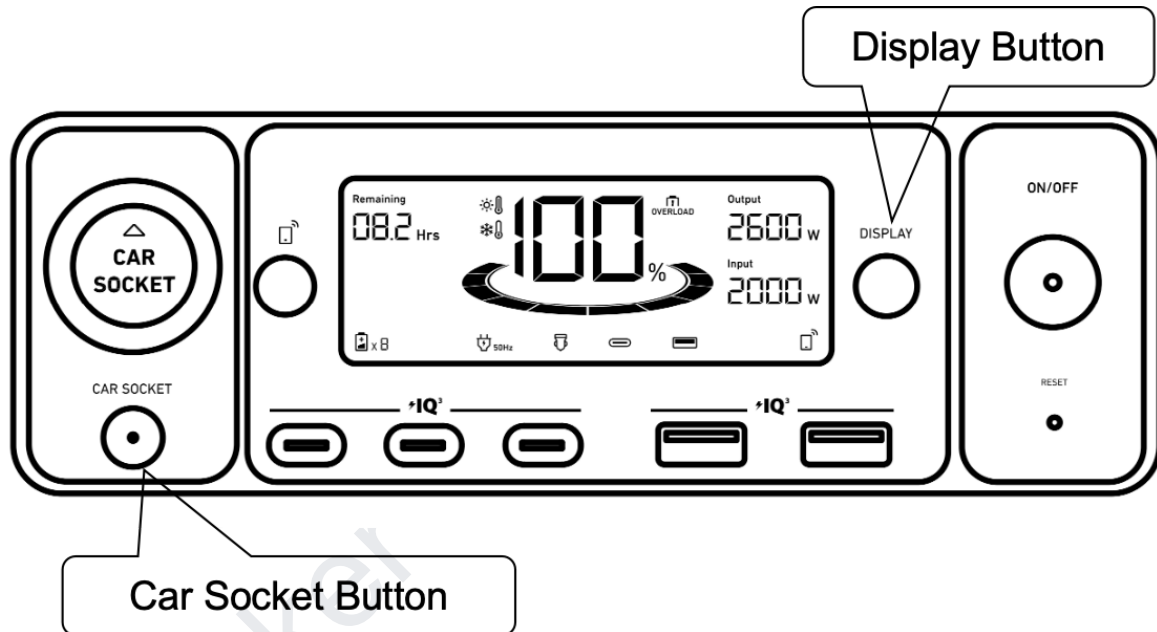
- Upload both app and device logs for further analysis.
- Use another phone to record a short video of the issue, then send it to us.

4. Noise

1. What should I do if my F3800 is very noisy?

- To diagnose the issue, please perform the following steps:
 - Share a short video of the noise.
 - Troubleshoot.

Enter Test mode by pressing the display and car socket buttons simultaneously for more than 3 seconds.



- Press the car socket button twice to switch to F2 (Fan Test) mode. You should see all numbers on the screen display as 1, as shown in the image below.



- Record a video of the following process. Press the display button, and all numbers on the screen should display 2. Wait a few seconds, press the display button again. Continue pressing the display button in this manner until all numbers are 5. When finished, share the video with us.
- Note: To exit Test mode, press the display and car socket buttons simultaneously for over 3 seconds.



- Upload both the app and device logs via Wi-Fi as per the attached picture.
- Share the battery cell temperature with us. You can find this in the Anker app.
- Provide the serial number (SN XXX) on the back of F3800.
- Share your order number and shipping address.

Appendix

Specifications And Configuration

Specifications	
Battery Type	LiFePO4
Cell Part Number	32140FS-15,000mAh
Number of Cells	80
Cell Capacity	51.2VDC 75Ah/3840Wh
AC Input	120V~15A (3 Hrs Max), 12A (Continuous), 60Hz L+N+PE

AC Input Power (Charging)	1.8kW Max
AC Input Power (Bypass Mode)	1.44kW Max
Solar Panel Input 1	- Firmware 1.7.8 or earlier: 11-32V=10A; 32-60V=25A (1.2kW Max) - Firmware 2.0.9: 11-28V=10A; 28-60V=27A Max (1.2kW Max) - Firmware 2.1.1 or later: 11-15V=10A; 15-60V=27A Max (1.2kW Max)
Solar Panel Input 2	- Firmware 1.7.8 or earlier: 11-32V=10A; 32-60V=25A (1.2kW Max) - Firmware 2.0.9: 11-28V=10A; 28-60V=27A Max (1.2kW Max) - Firmware 2.1.1 or later: 11-15V=10A; 15-60V=27A Max (1.2kW Max)
Car Charger Output	12V=10A
Home Panel Power Port	3.8kW Max (AC Input), 6kW Max (AC Output), 120V/240V, L1+L2+N+PE
AC Output Power (Total)	6kW Max
AC Output 1	120V~20A Max, 60Hz, 2.4kW Max
AC Output 2	120V~20A Max, 60Hz, 2.4kW Max
AC Output (NEMA 14-50 / L14-30)	120/240V~25A Max, 60Hz, 6kW 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	20ms
Discharging Temperature	-4°F-104°F
Charging Temperature	32°F-104°F
Size	27.6×15.3×15.6 in
Net Weight	132.2 lbs

Configuration								
Component								
Configuration	7.68kWh System	7.68kWh System	7.68kWh System	23.04kWh System	11.52kWh System	15.36kWh System	19.2kWh System	23.04kWh system
Product Model Name	F3800	F3800	F3800*2	F3800*2	F3800	F3800	F3800	F3800
Expansion Battery Model Name		BP3800	BP3800*2	BP3800*10	BP3800*2	BP3800*3	BP3800*4	BP3800*5
Battery								
Battery Capacity		7.68kWh	15.36kWh	26.88kWh	11.52kWh	15.36kWh	19.2kWh	23.04kWh

		System						
AC Output(Home Cycle)								
Rated Output Power		3.8kWh	6kWh	6kWh	5.7kWh	6kWh	6kWh	6kWh
Max Output Apparent Power		3.8kVA	6kVA	6kVA	5.7kVA	6kVA	6kVA	6kVA
Rated Output Voltage		120/240 VAC	120/240 VAC	120/240 VAC	120/240 VAC	120/240 VAC	120/240 VAC	120/240 VAC
AC Output(Backup)								
Rated Output Power		6kWh	6kWh	6kWh	6kWh	6kWh	6kWh	6kWh
Rated Output Voltage		120/240 VAC(Split-phase)	120/240 VAC(Split-phase)	120/240 VAC(Split-phase)	120/240 VAC(Split-phase)	120/240 VAC(Split-phase)	120/240 VAC(Split-phase)	120/240 VAC(Split-phase)
AC Input								
Max Input Apparent Power		3.8kVA	6kVA	6kVA	5.7kVA	6kVA	6kVA	6kVA

Product Info

1. F3800

User Manual :

https://ankertechnologycompanyltd.my.salesforce.com/sfc/p/#5g000004DkWQ/a/5g000002wQQGk/qo02gFUkfBitA91FQts_I_xSoX8s3uqd98SXCc_BWGG

How to guide

<https://www.youtube.com/watch?v=CmtxzEPL25E>

This video will guide how to charge your F3800 through AC input and solar panels, as well as connecting an Expansion Battery and controlling the power station through the Anker App.

2. Home power panel with F3800

1. How to install Home Power Panel ?

Maximize Savings with Anker SOLIX F3800 & HPP Local Feed-in Function:

<https://www.youtube.com/watch?v=VYSD8zAWPPw>

2. Home Power Panel Installation Video:

The Anker App and Home Power Panel Video: <https://youtu.be/p5PXk-ziuWI>

Home Power Panel Manual:

<https://www.anker.com/blogs/smart-home/f3800-hpp-owner-manual>

3. Does Home Power Panel make a difference?

With Home Power Panel, you have more control over how your appliances are powered, helping you save on electricity bills.

You can log into the Anker app and select a mode that prioritizes whether you want to use solar power, the grid, or F3800. No matter what mode you select, your appliances function as normal.

Here is some other information you may find useful.

If you have a Backup Load Center (subpanel), devices connected to it should not exceed 50A.

If an outage occurs, F3800 will supply power to devices connected to the Backup Load Center. At this time, F3800 can only output 25A, but two F3800 power stations can produce 50A.

We recommend only connected devices to the Backup Load Center that are essential during an outage. We do not recommend connecting high-powered devices to the Backup Load Center because it can quickly deplete power stored in F3800.

4. Transfer Switch with F3800

1. Installation and operating instructions:

<https://api.reliancecontrols.com/media/DAFD6560942639833572/DAFL6775321853807447.pdf>

<https://www.youtube.com/watch?v=xTqjw6WJ7o&list=PLpYCE0n7d22iDNwpVnOF9HULSUYBBRY86&index=2>