

Anker SOLIX Home Power Panel Troubleshooting

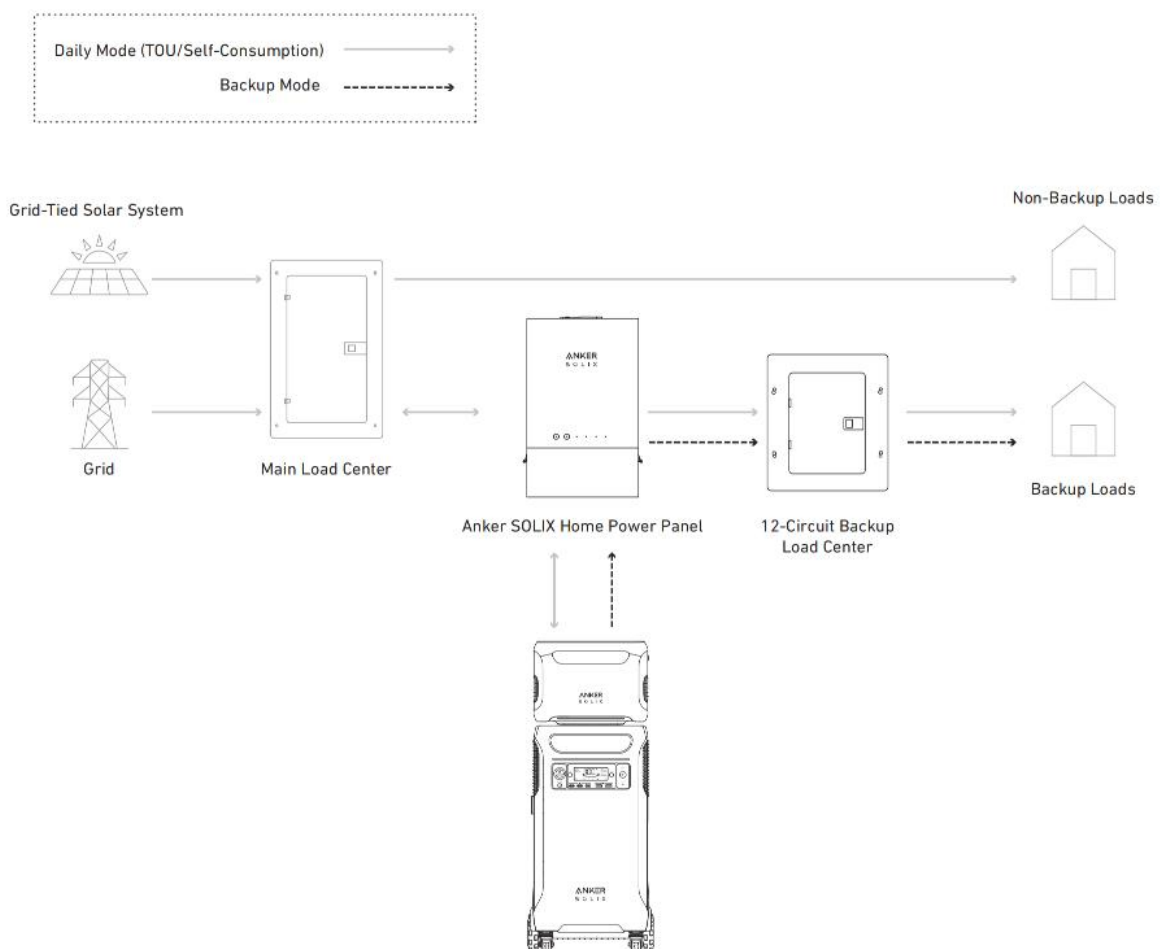
1. Product Overview	2
1.1 System Overview	2
1.2 System Introduction	2
2. Recommended Connection Diagram	4
3. Powering On the System	5
3.1 Inspecting the System	5
3.2 Powering On Anker SOLIX Home Power Panel	5
3.3 Adding Devices and Starting the Self-Test	6
4. Troubleshooting	7
4.1 The Anker app cannot connect to Home Power Panel (Device found / Device not found).	7
4.2 After powering on Anker SOLIX F3800, all Home Power Panel lights are off. Long pressing on/off has no response. After plugging in F3800, the light on the upper left side of Home Power Panel activates.	7
4.3 After plugging in Anker SOLIX F3800, its light is flickering.	7
4.4 The Home Power Panel backup port has abnormal voltage, or the backup light is not on.	8
4.5 Subpanel load voltage is abnormal after switching from the grid to Anker SOLIX F3800 power and turning on the breaker.	8
4.6 The self-test failed and error messages are shown (E4, E9).	8
4.7 ATS faults E5F and E60 occur during operation.	9
5. Appendix	10
5.1 Other CT Connection Methods	10
5.2 Subpanel Connection Methods	13
6. Reference	18

1. Product Overview

1.1 System Overview

Anker SOLIX F3800 Home Energy System contains F3800 Portable Power Station, BP3800 Expansion Battery, and Home Power Panel, which provides three modes for home energy usage:

1. Self-Consumption mode: Anker SOLIX F3800 can charge through the solar system and power household loads to maximize sustainable power and save electricity.
2. Time-of-Use (TOU) mode: Charge Anker SOLIX F3800 when electricity prices are low, then use stored energy during peak electricity prices to lower your bill.
3. Automatic Backup mode: Anker SOLIX F3800 supplies backup power to your home during outages



1.2 System Introduction

1. Anker SOLIX F3800 Home Power Panel Kit allows you to integrate F3800 into your home power system. Home Power Panel specifically allows a rooftop solar panel system to charge F3800, or you can

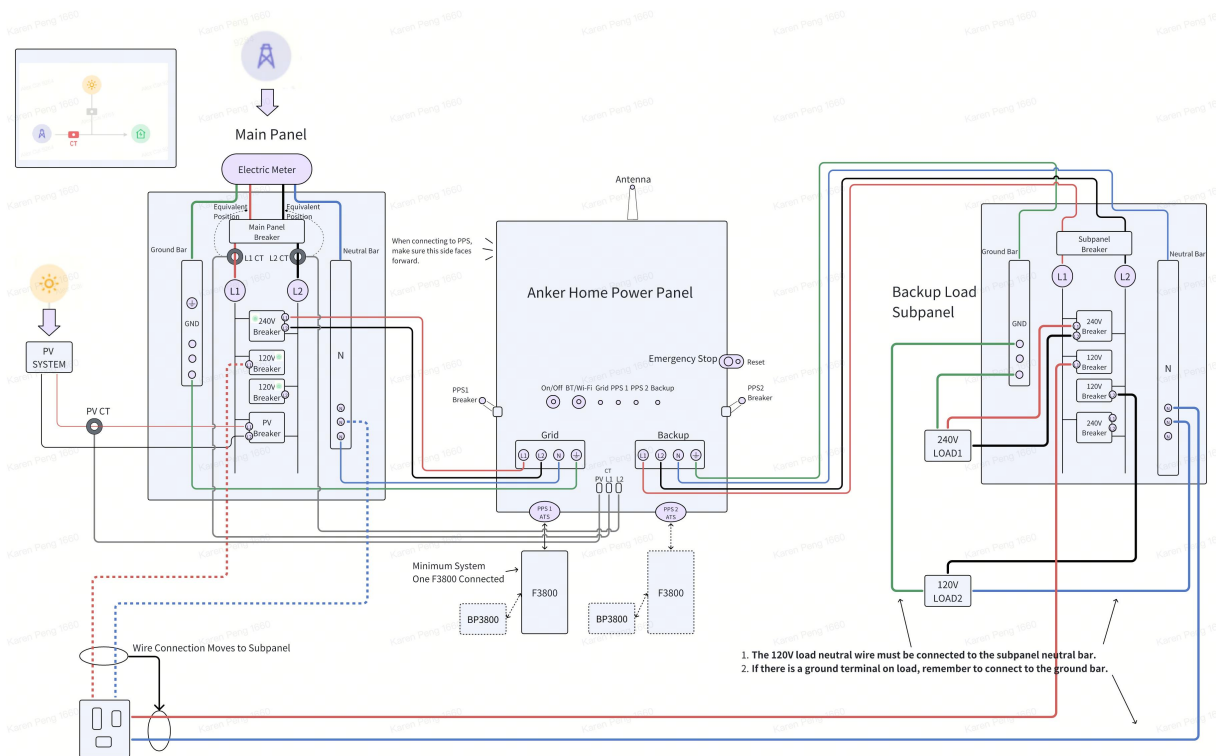
use it to charge F3800 via the grid during super off-peak hours, storing the power for home loads during peak pricing times.

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 current transformer.)

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

2. Recommended Connection Diagram



Notes:

1. For other current transformer connection methods and corresponding app settings, please refer to: 5.1 Other CT Connection Methods.
2. For common correct and incorrect sub-panel connection methods, please refer to: 5.2 Subpanel Connection Methods.

3. Powering On the System

3.1 Inspecting the System

Carefully check if the connections of each subpanel are correct according to the Recommended Connection Diagram, especially the subpanel load's N wire connected to the Home Power Panel backup.

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

1. Confirm the emergency stop button is on.
2. Confirm the power station 1 and 2 breakers are on.
3. Confirm the Wi-Fi antenna is raised.
4. Confirm the L1 and L2 current transformers are in the correct positions. An incorrect solar (PV) current transformer will not affect self-testing, but will affect electricity rate calculations.
5. Before plugging Anker SOLIX F3800 into Home Power Panel, confirm the following information:
 - a. Use the Anker app to connect to Anker SOLIX F3800 and confirm F3800's firmware version is 1.7.6 or above. If not, update to the latest firmware.
 - b. The state of charge (SoC) of the F3800 battery is less than 95%.

3.2 Powering On Anker SOLIX Home Power Panel

After powering on the breaker that supplies power to Home Power Panel from the main panel, supply power to Home Power Panel, and press the on/off button for 3 seconds to turn it on. Confirm the following information:

1. The on/off light is flashing. This indicates the self-test has not occurred, or the self-test was unsuccessful.
2. The Bluetooth light is flashing. This indicates Anker SOLIX F3800 is not connected to the Anker app.
3. The grid light is steady, which indicates normal grid voltage.
4. After plugging in Anker SOLIX F3800, a light on the upper left side of Home Power Panel will illuminate, indicating a physical connection between F3800 and Home Power Panel.

The lights for Power Station 1 and 2 are steady. This will depend on the specific Home Power Panel port Anker SOLIX F3800 is plugged into. The connected F3800 screen will show an icon that indicates F3800 can communicate with Home Power Panel.

5. The backup light is steady, indicating backup two-phase voltage is normal while connected to the

grid.

Note: For more information on the indicator light display of Anker SOLIX Home Power Panel, please refer to: <https://www.anker.com/blogs/smart-home/f3800-hpp-owner-manual>.

3.3 Adding Devices and Starting the Self-Test

Use the Anker app to connect to Home Power Panel. After connecting, the Bluetooth light will be steady. Follow the prompts in the app to perform the self-test. Once the self-test is complete, the on/off light will be steady.

Note: Before the self-test, do not use Off-Grid mode to supply power to the load.

1. Update the firmware to the latest version.
2. Wait for the self-test to complete.
3. Select the current transformer connection method.
4. Select the reserve power level.
5. Select either Self-Consumption or Time-of-Use modes.

4. Troubleshooting

4.1 The Anker app cannot connect to Home Power Panel (Device found / Device not found).

- Confirm if the Wi-Fi antenna is raised correctly and if the Wi-Fi light is flashing, which indicates the antenna is emitting a signal.
- Ensure the Wi-Fi signal is stable or try using a mobile hotspot.
- Because the Anker app connects to Home Power Panel in three stages, determine at which stage the connection error occurs:
 - Stage 1: Searching for the device.
 - Stage 2: Connecting to the device.
 - Stage 3: Configuring Wi-Fi.
- If the issue persists, please upload the app logs and contact Anker customer service with your product serial number for further analysis.

4.2 After powering on Anker SOLIX F3800, all Home Power Panel lights are off. Long pressing on/off has no response. After plugging in F3800, the light on the upper left side of Home Power Panel activates.

- Confirm if the grid port voltage of Home Power Panel is normal.
- If the grid port voltage of Home Power Panel is normal, but the issue persists, contact Anker SOLIX customer service for assistance.

4.3 After plugging in Anker SOLIX F3800, its light is flickering.

- First check if the light on the upper left side of Home Power Panel is illuminated. If so, it means Home Power Panel recognizes the physical connection to Anker SOLIX F3800. If not, troubleshoot by checking the Home Power Panel port of F3800, the Home Power Panel cable, and the Power Station port of the Home Power Panel in this order. You can also try changing the cable, replacing F3800, or plugging into a different Power Station port on Home Power Panel.

Note: The physical connection LED is shared by two F3800 units. It is easier to troubleshoot using only one Anker SOLIX F3800.

- If there is light on the upper left side of Home Power Panel, but the F3800 LED only flashes briefly before stopping, it indicates the F3800 firmware is out of date. Please use the Anker app to update Anker SOLIX F3800 to the latest firmware.
- If the light on the upper left side of Home Power Panel is flashing, it indicates a communication issue between Anker SOLIX F3800 and Home Power Panel. Please troubleshoot by checking the Home Power Panel port of F3800, the Home Power Panel cable, and the Power Station port of the Home Power Panel in this order. You can also try changing the cable, replacing F3800, or plugging into a different Power Station port of the Home Power Panel.

4.4 The Home Power Panel backup port has abnormal voltage, or the backup light is not on.

- First, disconnect the cable between the Home Power Panel backup port and the subpanel, then check if there is an issue with the downstream connection.
- If the issue persists and Home Power Panel is powered by the grid with normal voltage at the grid port, please contact Anker customer service.
- If the issue persists and Home Power Panel is powered by Anker SOLIX F3800, check the Home Power Panel port of F3800, the Home Power Panel cable, and the Power Station port of the Home Power Panel in this order. Try changing the cable, replacing F3800, or plugging into a different Power Station port of the Home Power Panel.

4.5 Subpanel load voltage is abnormal after switching from the grid to Anker SOLIX F3800 power and turning on the breaker.

Check if the subpanel N load wire is correctly connected to the subpanel N row. Follow the connection diagram shown above.

4.6 The self-test failed and error messages are shown (E4, E9).

- First, review the System Activation section. Confirm all switches and lights are in the correct state.
- Troubleshoot error prompts as suggested by the Anker app.
- Check the Recommended Connection diagram. Confirm that the current transformer installation for L1 and L2 is correct. To check for CT damage, you can swap the L1 and L2 CTs.

- If you have two Anker SOLIX F3800s, disconnect one to troubleshoot. Change ports and cables to eliminate any issues with F3800 and its connections.

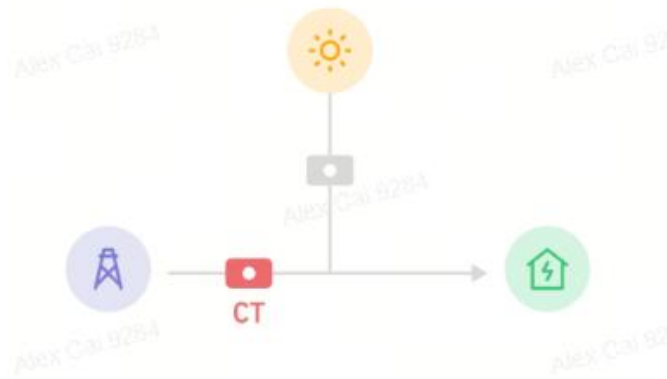
4.7 ATS faults E5F and E60 occur during operation.

Update the firmware for both Anker SOLIX F3800 and Home Power Panel to the latest version. If the Anker app does not prompt a firmware update, contact Anker SOLIX customer service and have your device serial numbers ready.

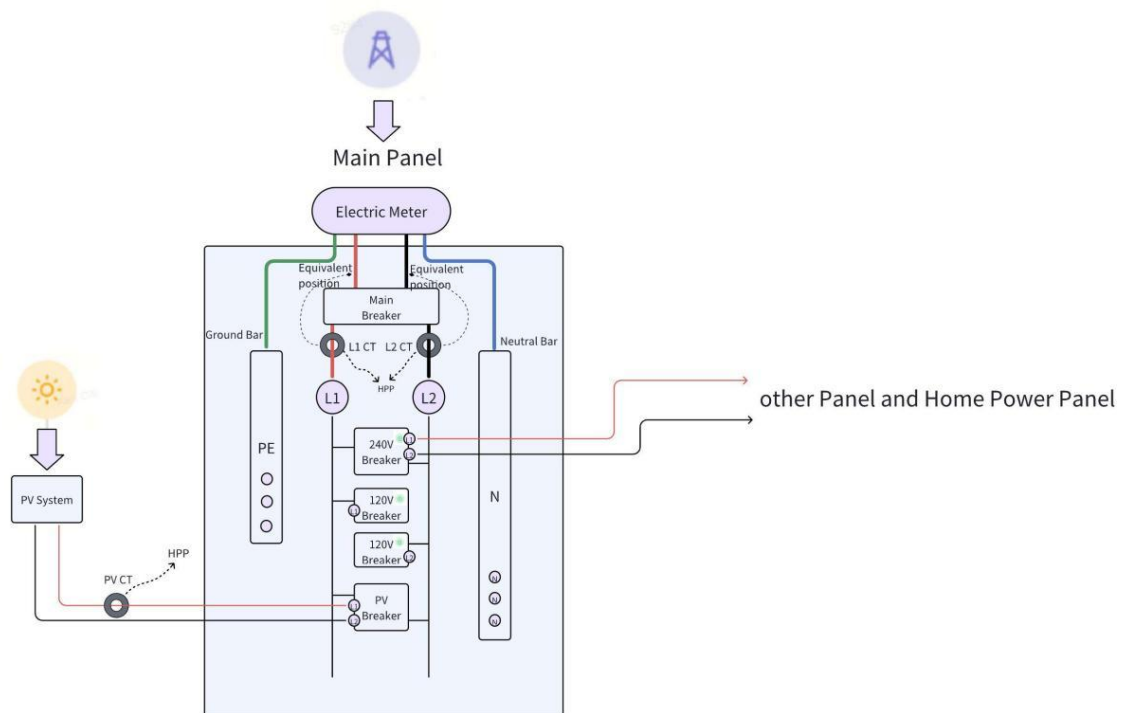
5. Appendix

5.1 Other CT Connection Methods

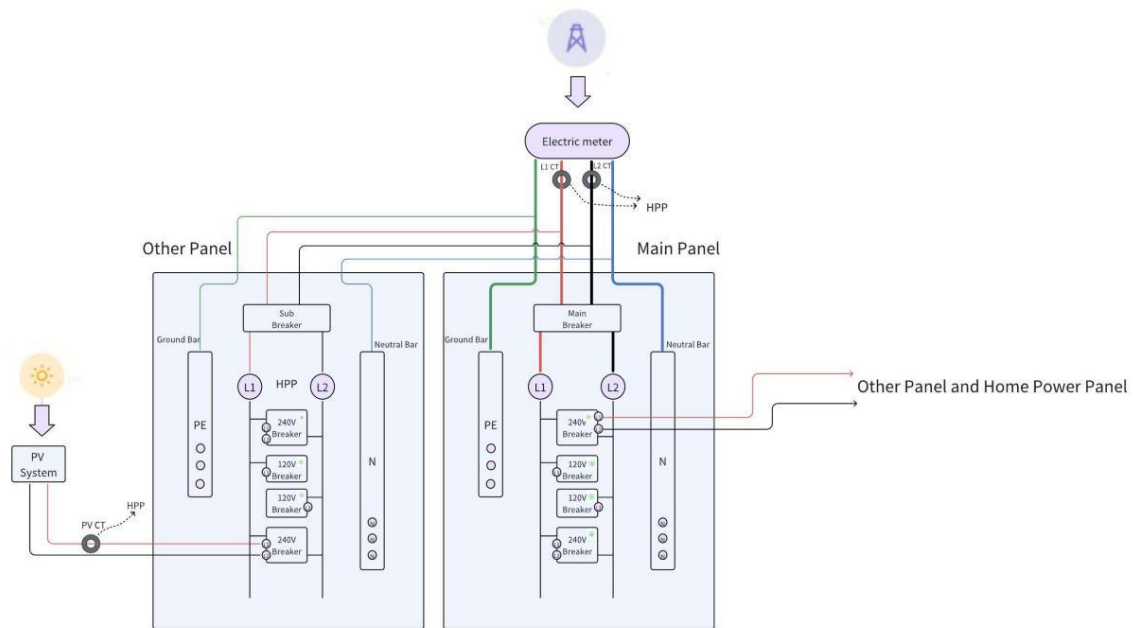
5.1.1 Type 1



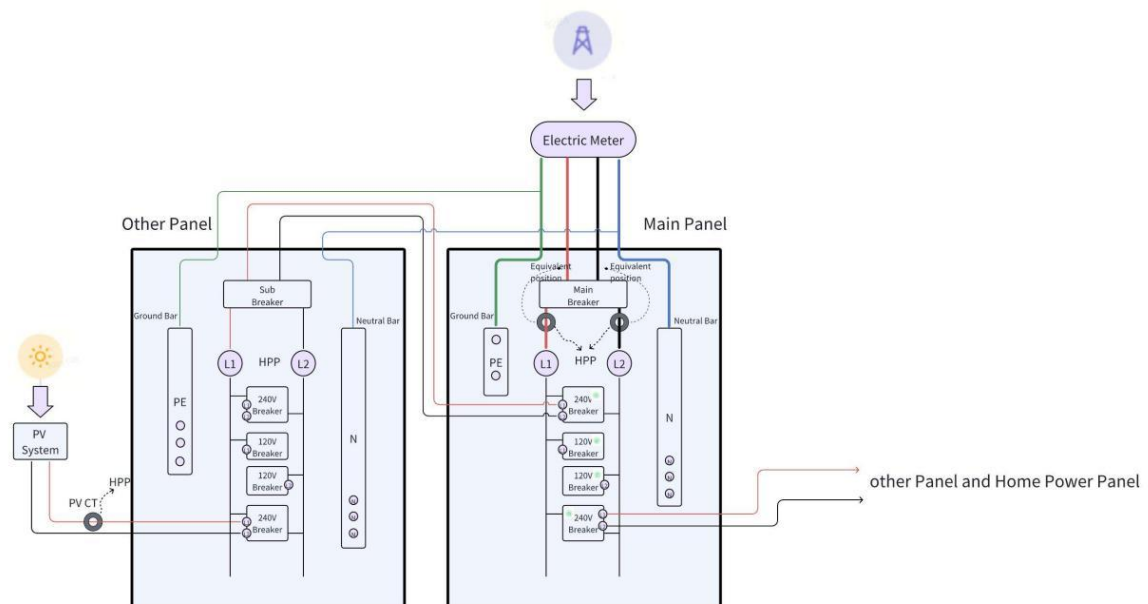
1. CT Installation Method 1



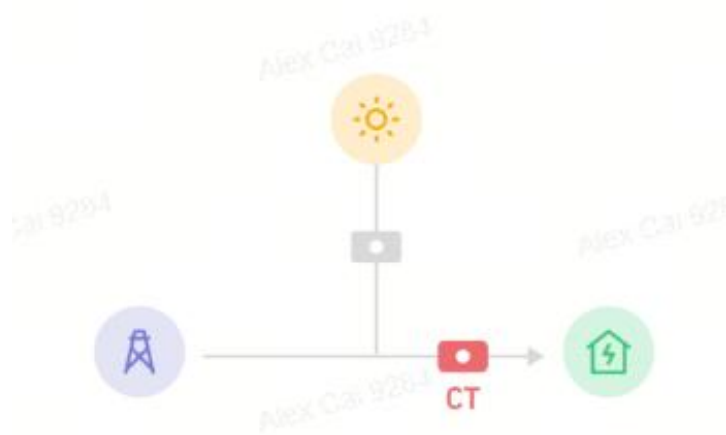
2. CT Installation Method 2



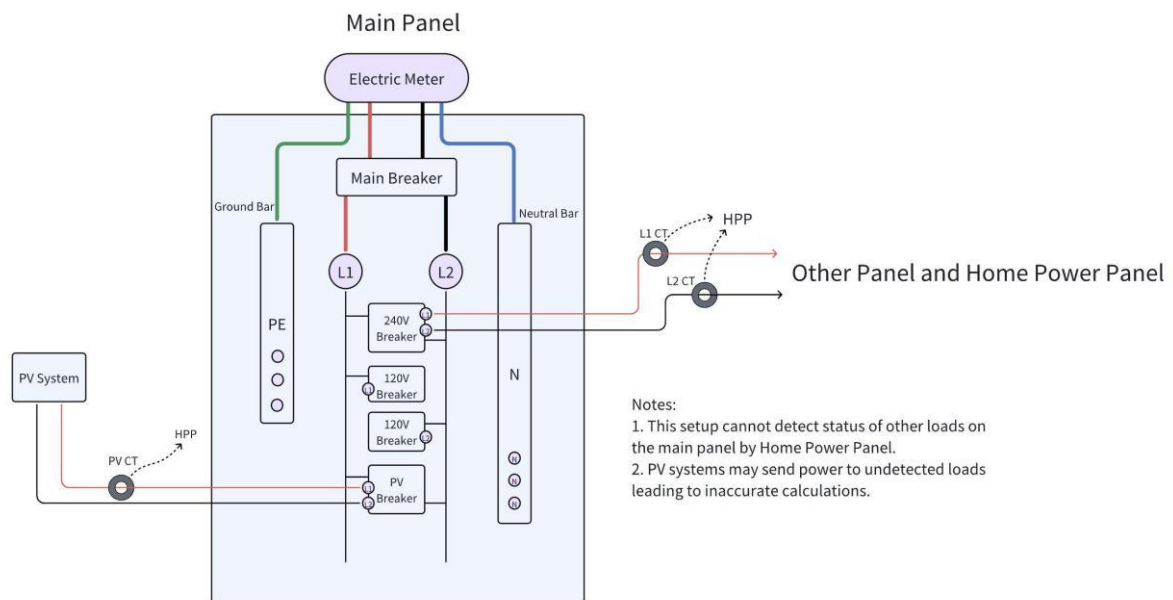
3. CT Installation Method 3



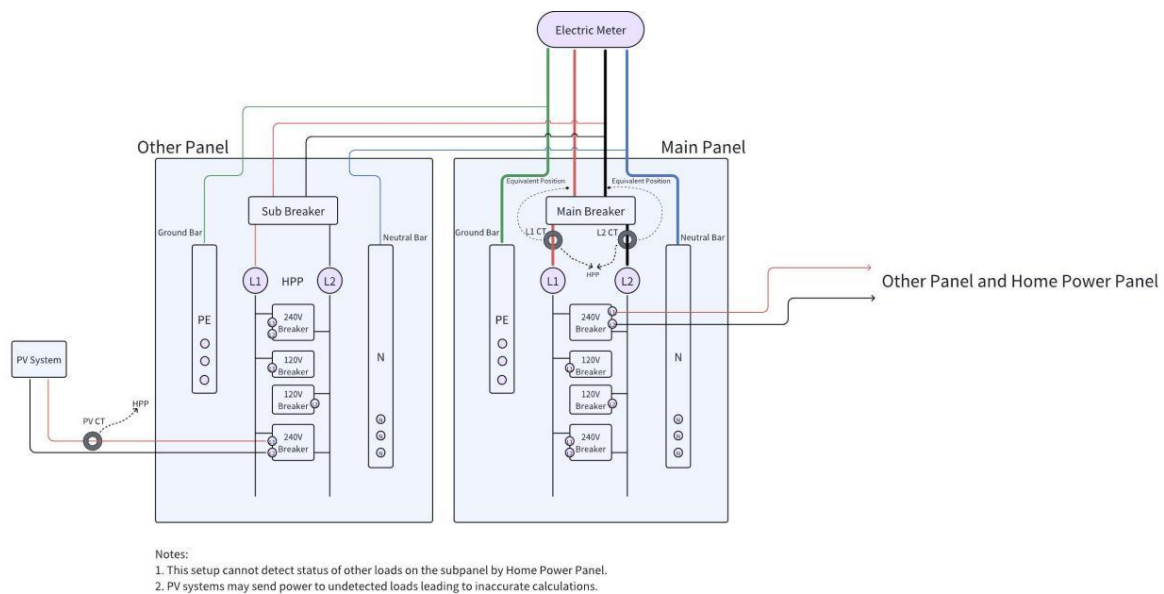
5.1.2 Type 2



1. CT Installation Method 1



2. CT Installation Method 2

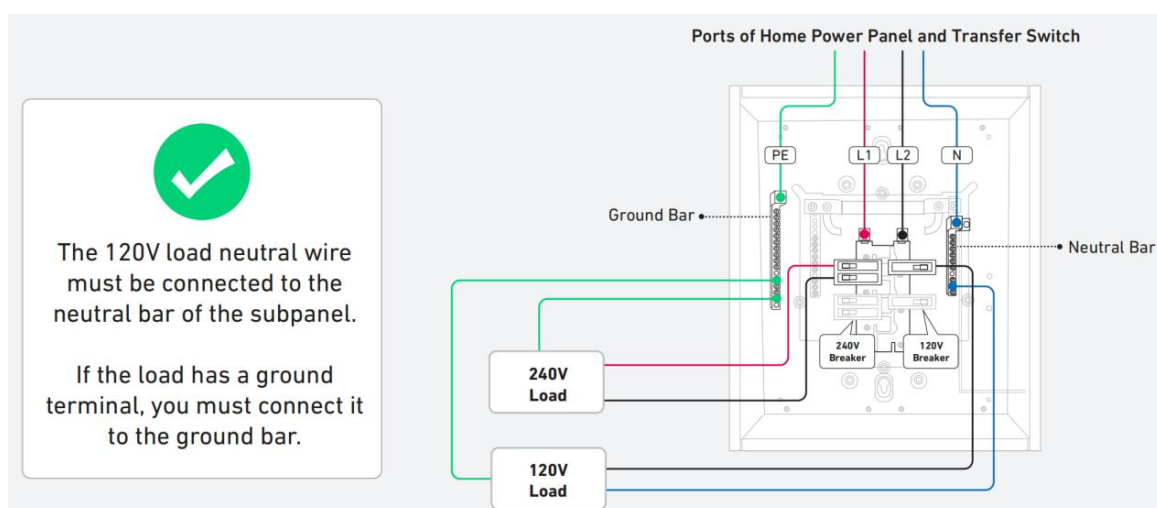


5.2 Subpanel Connection Methods

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.

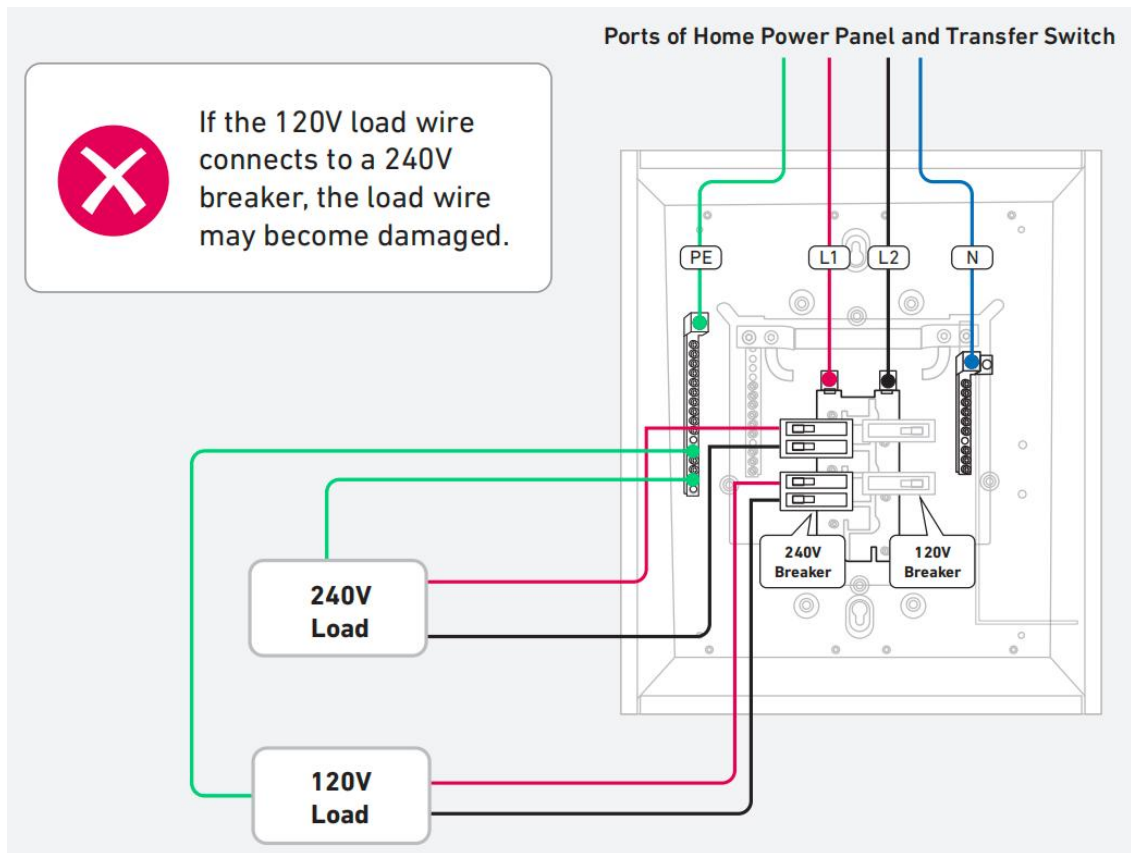
5.2.1 Correct Connection

1. Correct Subpanel and Anker SOLIX Home Power Panel/Transfer Switch Connection

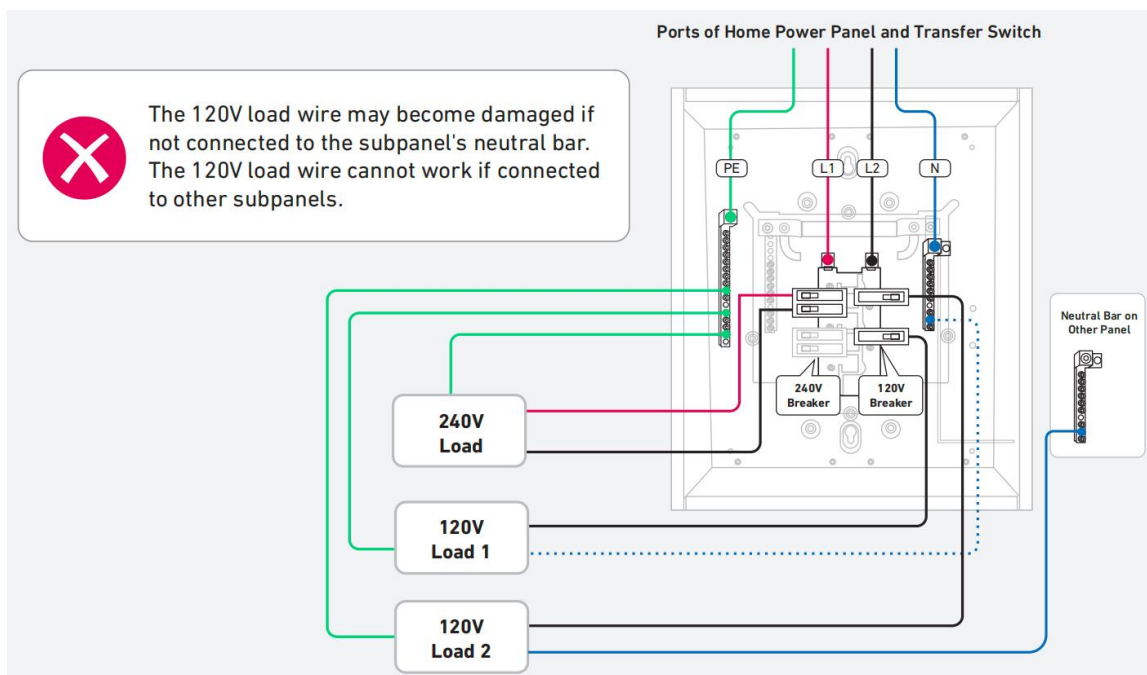


5.2.2 Wrong Connection

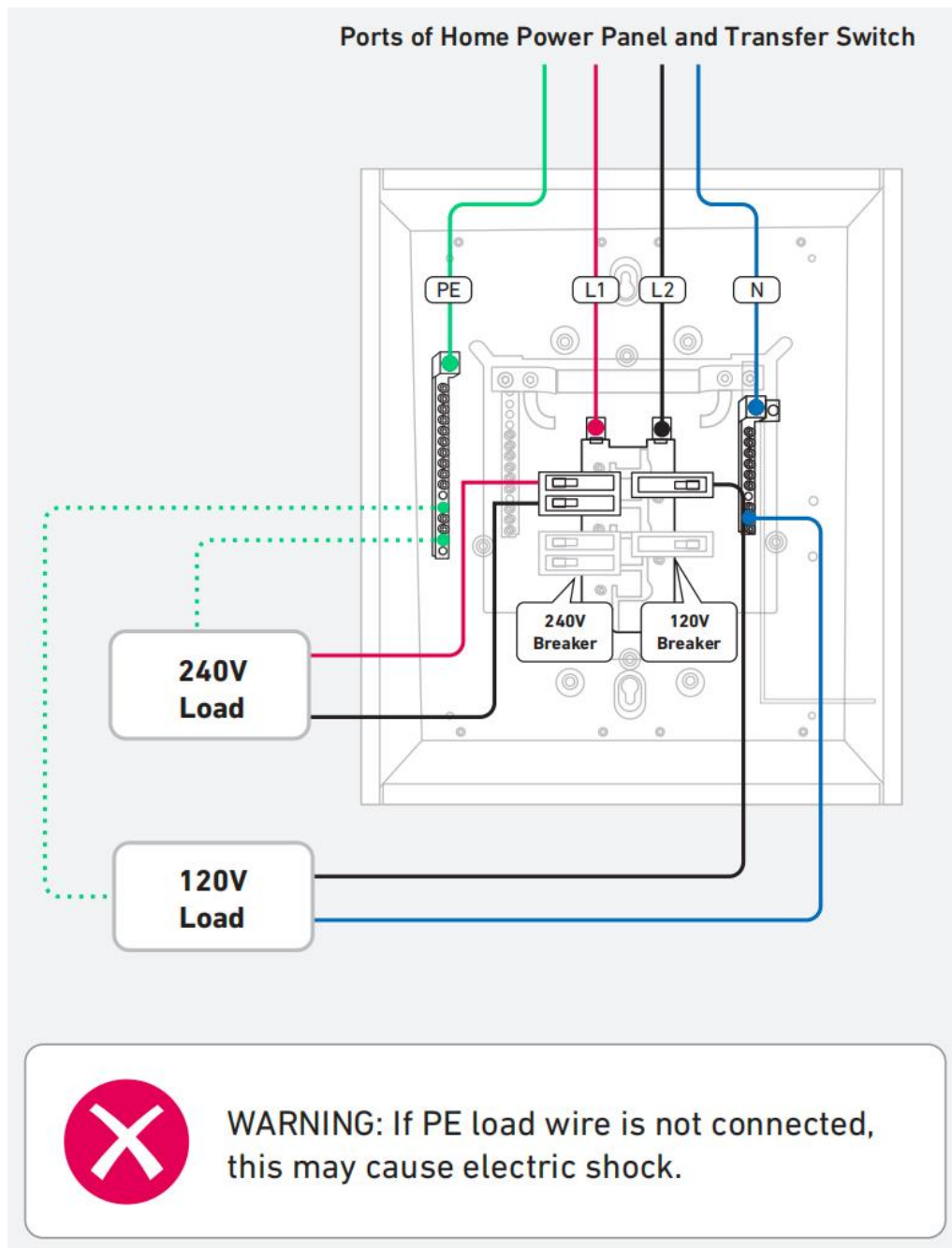
1. Subpanel 120V load wire connected to a 240V breaker.



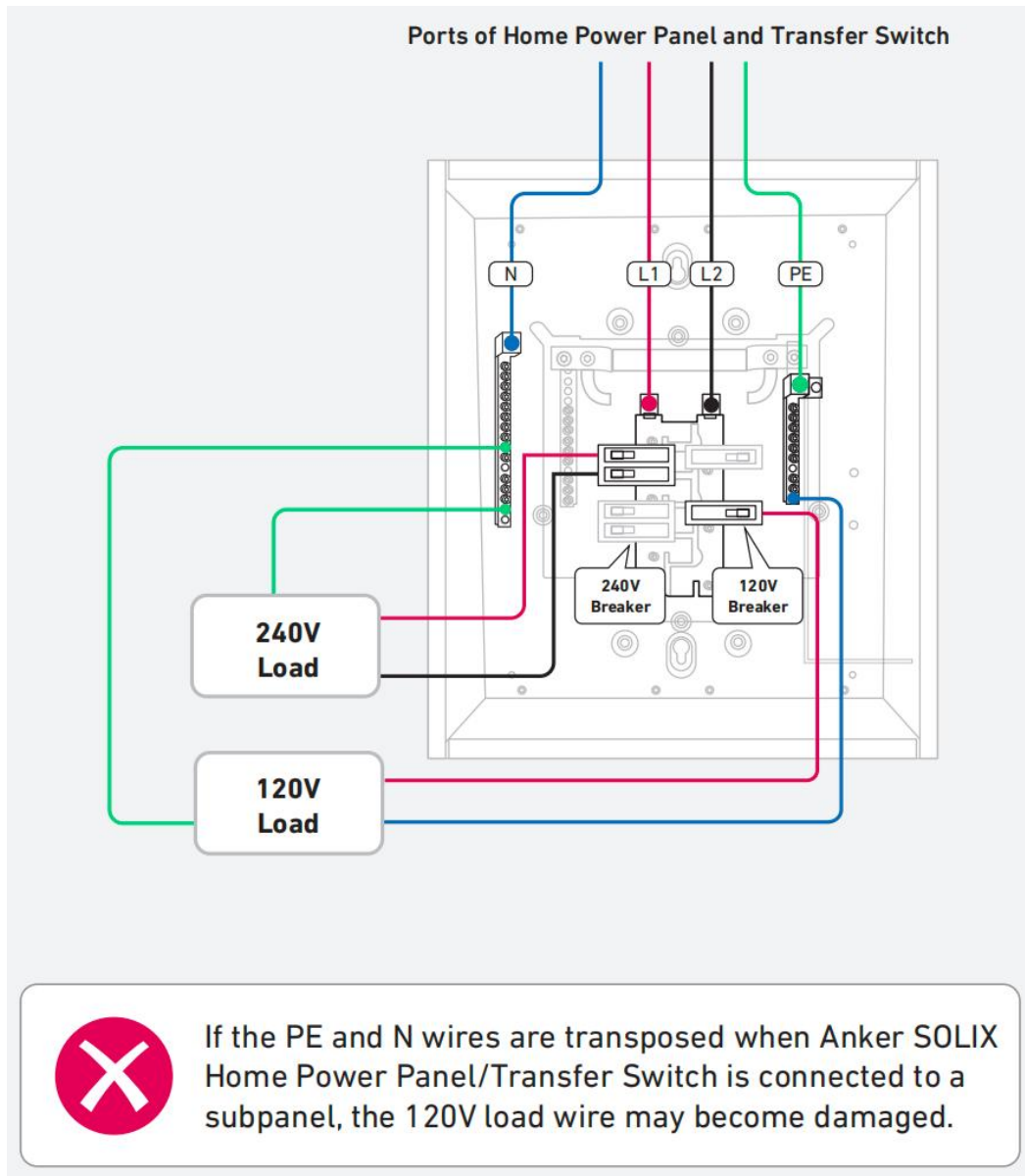
2. Disconnected N wire for subpanel.



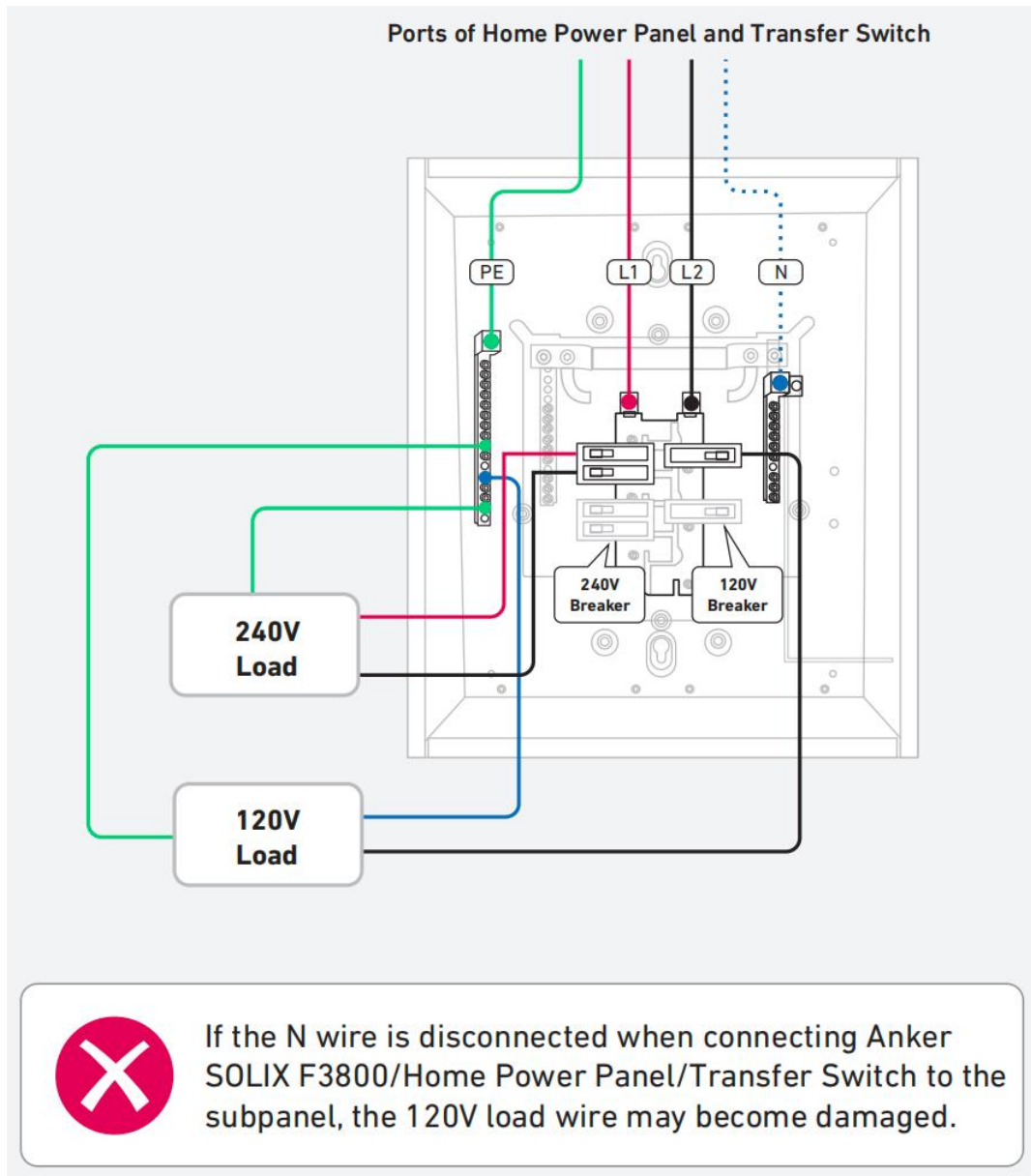
3. Disconnected PE wire for subpanel load.



4. PE and N wires are reversed for subpanel.



5. Disconnected N input wire from subpanel.



6. Reference

- How to Install Anker SOLIX Home Power Panel: <https://www.youtube.com/watch?v=DWe7ixNFYE4>
- How to Use Anker App to Set Up Anker SOLIX Home Power Panel: <https://youtu.be/p5PXk-ziuWI>
- Anker SOLIX F3800 and Home Power Panel Owner Manual: <https://www.anker.com/blogs/smart-home/f3800-hpp-owner-manual>