



FranklinWH Smart Circuits Quick Installation Guide

©2026 FranklinWH Australia Pty Ltd. All rights reserved.

All information in this Manual is subject to the copyright and other intellectual property rights of FranklinWH Australia Pty Ltd. This manual may not be modified, copied or reproduced, in whole or in part, without the prior written permission of FranklinWH Australia Pty Ltd.

Please visit [FranklinWH Support](#) for the latest FranklinWH documents.

All brands and trademarks mentioned in this document are the property of their respective owners, and their use in this document does not imply the sponsorship or recognition of their products or services.

Please read this document carefully to ensure the best reliability of the product and your warranty eligibility. For further information about the warranty, please refer to the **FranklinWH Limited Warranty**.

This document is intended for use by professional installation and maintenance service providers only and no statements, information or recommendations in this document constitute any express or implied warranty.



Please read this document carefully before installing or using the FranklinWH equipment. Failure to follow any instructions or warnings in this document may result in damage to the equipment, personal electric shock, severe injury, or even death.

Product Information

FranklinWH System is composed of aPower, aGate, other electrical components, and the FranklinWH App. This document applies only to the following products: aPower X, aGate X, the Smart Circuits module, and the FranklinWH App.

FranklinWH Australia Pty Ltd. reserves the right to make any improvements to the product, and the contents in this document shall be subject to updates without further notification.

All images and pictures provided in this Manual are only for demonstration purposes and may differ in detail from the product, based on the product version.

Feedback

If you have any questions or comments, please send us an email at: service-au@franklinwh.com

Disposal of Scrapped Products

Scrapped products (including their internal chemicals and electrical materials) should not be disposed of with household wastes. Please refer to your local laws and regulations regarding disposal. These certification labels are for information only.



Table of Content

Smart Circuits Overview.....	1
Installation Steps.....	2
Completing Installation.....	7
Configure Smart Circuits using the FranklinWH App.....	9

Smart Circuits Overview

The Smart Circuits Module is an optional aGate component. It provides remote management of two circuits, from anywhere and anytime.

Easy Control

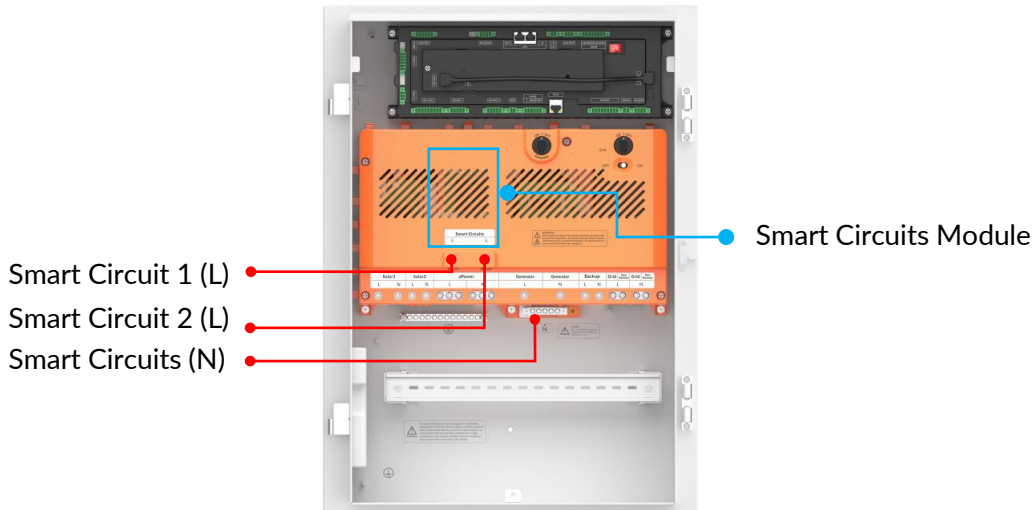
Remotely and automatically manage unique home loads, connecting and disconnecting them easily via the FranklinWH App.

Smart

Set working times for household appliances, adding convenience to your daily life.

Cost Saving

Work within TOU rate structures to power large loads at a low electricity prices.



DANGER

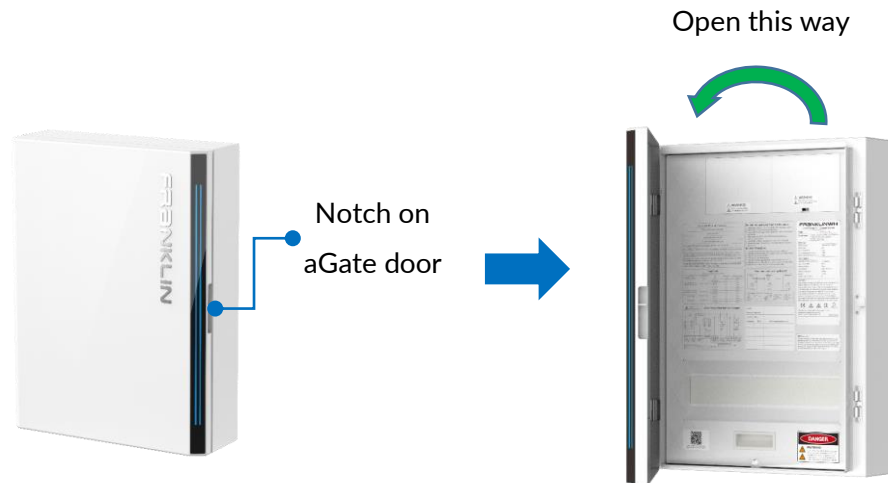
Despite being able to control the Smart Circuits through the FranklinWH App, the remote **OFF** status does not mean the circuit has been physically disconnected. It is important to test the circuit status during the installation process.

Do not touch the output ports of the Smart Circuits Module directly or indirectly through conductive material, before disconnecting the circuit breakers.

Installation Steps

1) Detach the aGate door and inner panel.

- a) Grasp the small notch on the right side of the aGate. Lift it slowly until the aGate door is completely open.

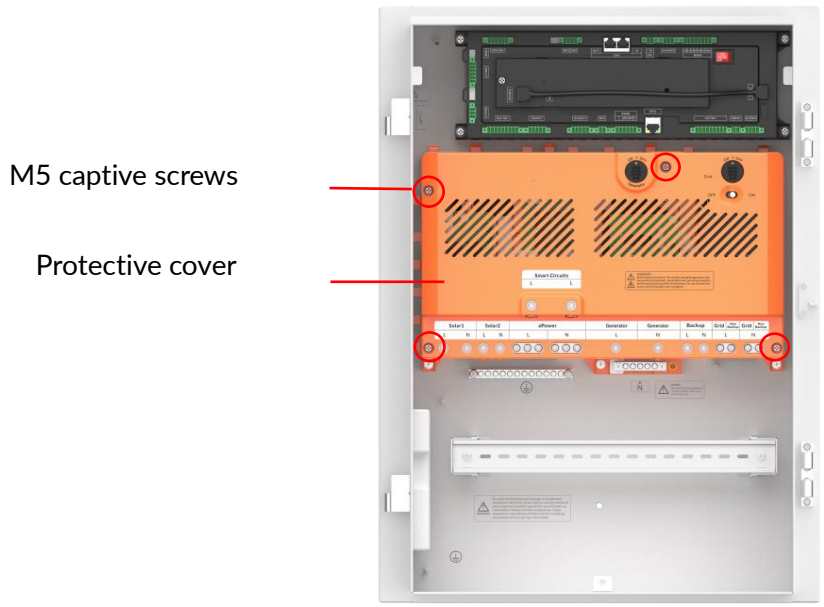


- b) **Detach** the door: Gently lift the door panel upward, remove the aGate door after the hinges are separated, and properly store it.



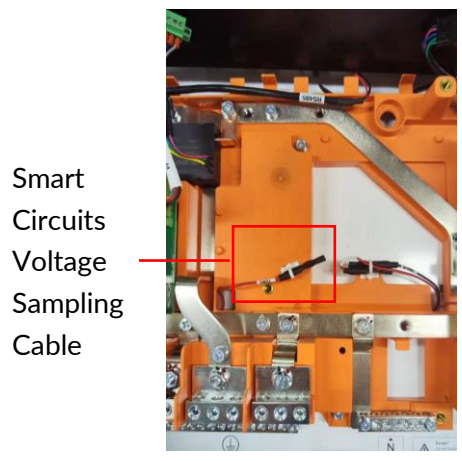
- c) Remove the inner panel: Use a Phillips head screwdriver or an electric screwdriver with a Phillips head screw bit. Remove the screw. Remove the aGate inner panel and properly store it.

- d) Remove the four M5 captive screws and the protective cover.

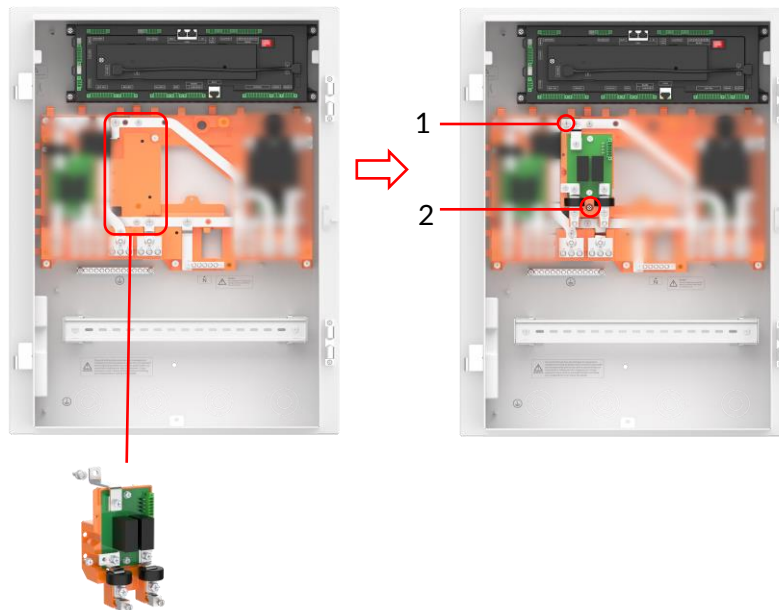


2) Install the Smart Circuits Module

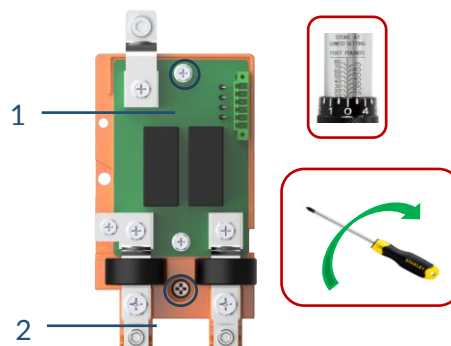
- a) Make sure all breakers in the aGate and all switches connected to the aGate are disconnected. Use a multimeter to check the voltages at both input and output terminals of aGate are 0.
- b) Before positioning the Smart Circuits Module, cut the cable tie, remove the voltage sampling cable, and set it aside for later use.



- c) Place the Smart Circuits Module in the position as shown in the figure below and check that installation holes 1 and 2 have been properly aligned.



- d) Tighten the M6 washer screw at position 1 to 6.0 N·m using a Phillips head screwdriver. Tighten the M5 washer screw at positions 2 to 3 N·m, using a torque screwdriver.



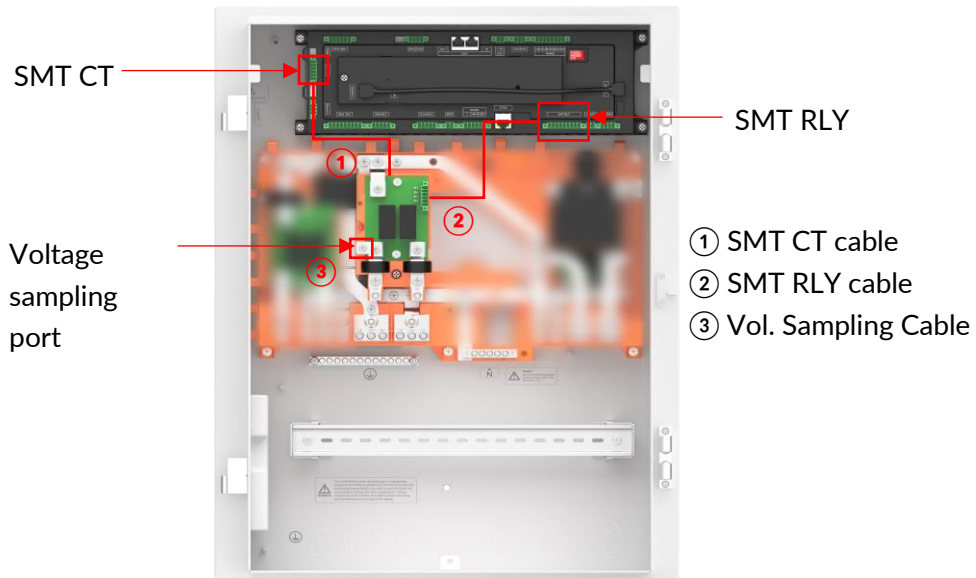
For the recommend installation parameters, please refer the following table.

Item	Applicable Cable	Wiring Torque	Stripping Length
Smart Circuits	2.5-10 mm ²	3.9-4.5 N·m	12 mm

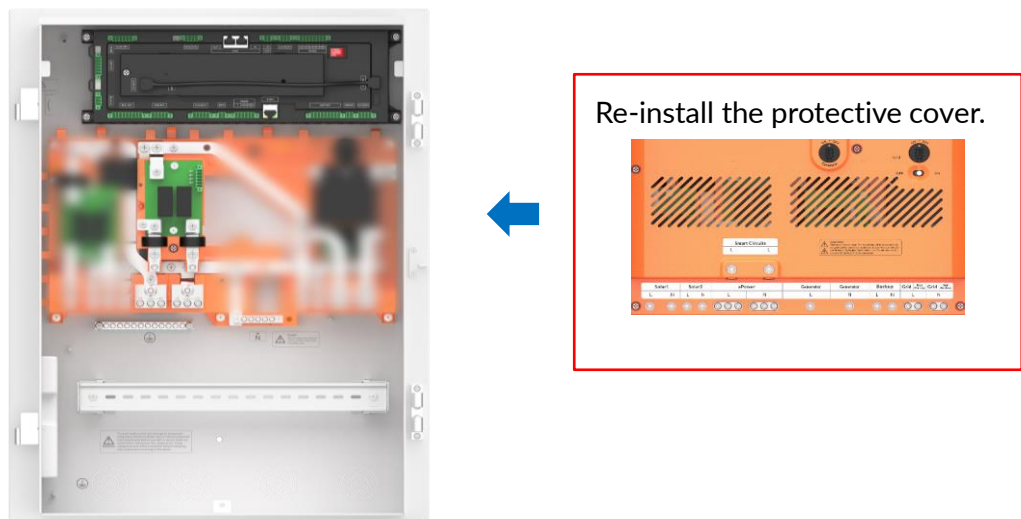
- e) Wiring the 3 types of cables.

- ① The SMT CT cable is used for CT current reading. Plug the CT cables into the SMT CT port to complete the connection.

- ② The SMT RLY is used for power supply to the Smart Circuits Module. Plug the relay drives cables into the SMT RLY connection port. Plug the other end to the module's J4 Port.
- ③ The Voltage Sampling Cable is used for sampling voltage. Remove the heat shrink tube from the voltage sampling cable on the aGate (See step b) and route it to the voltage sampling port. Tighten using an M4 screw.



- f) Re-install the protective cover and fasten the 4xM5 captive screws, then tighten them to the recommended torque.



NOTE

Secure the terminals on the aGate using a 4 mm hex wrench.

Stripping length is only for the aGate terminals. The stripping length of the circuit breaker terminals, the installation torque, and the tool used are determined by the brand and model of the circuit breaker used onsite.

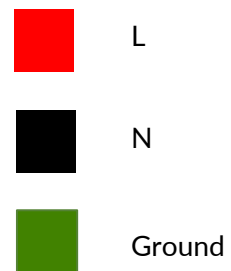
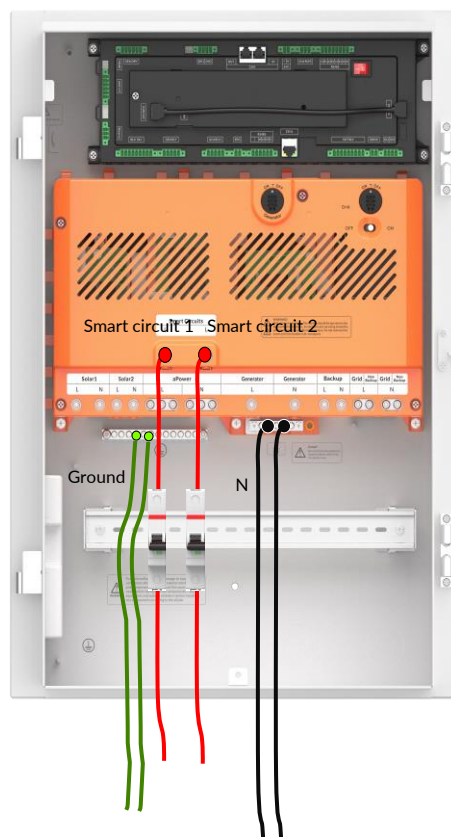
Connecting the Smart Circuits

Use the photo below for reference for Smart Circuits wiring. Each Smart Circuit has a separate CT to measure the power usage.



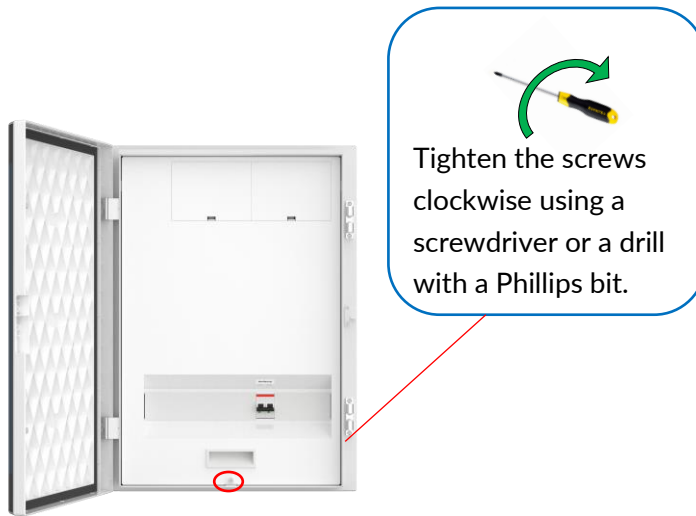
NOTE

Refer to breaker specifications for the torque values for the breaker output cable screws. The ground cable does not pass through the circuit breaker.

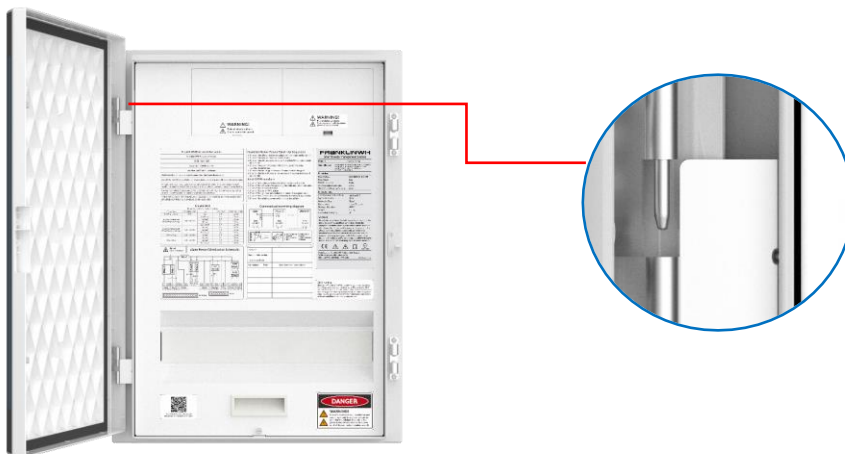


Completing Installation

- a) Install the inner panel and fasten it by tightening the M5 x 12 combination bolt.



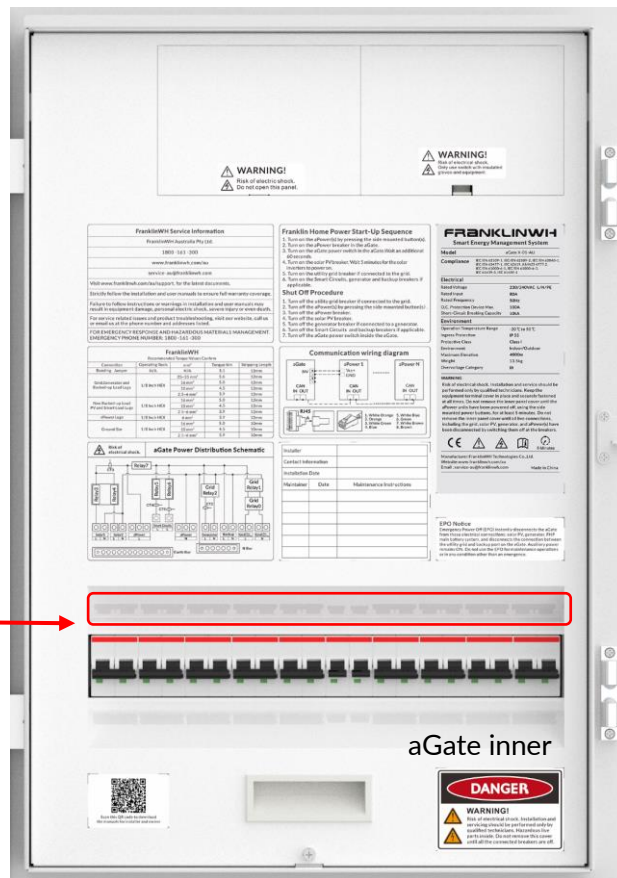
- b) Mount the aGate door hinges on the aGate cabinet.



After the breakers are installed, place the labels from the literature kit (bag with labels and accessories) on the inner panel of aGate according to the position of the breakers, as shown in the diagram below.



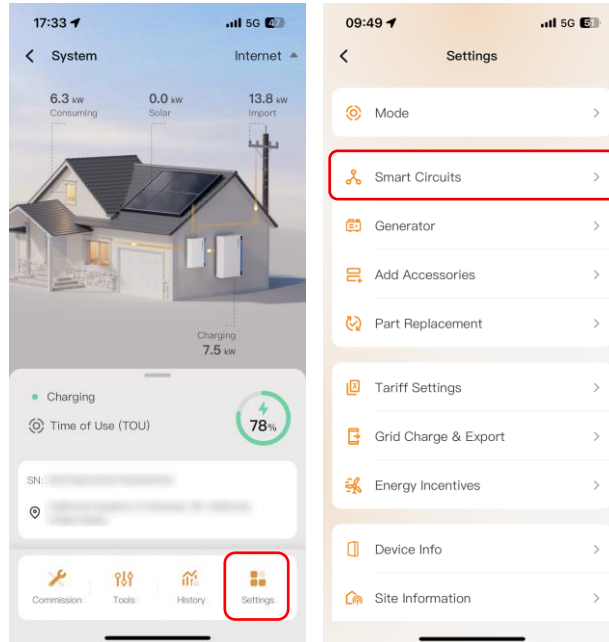
Labels



Label positions

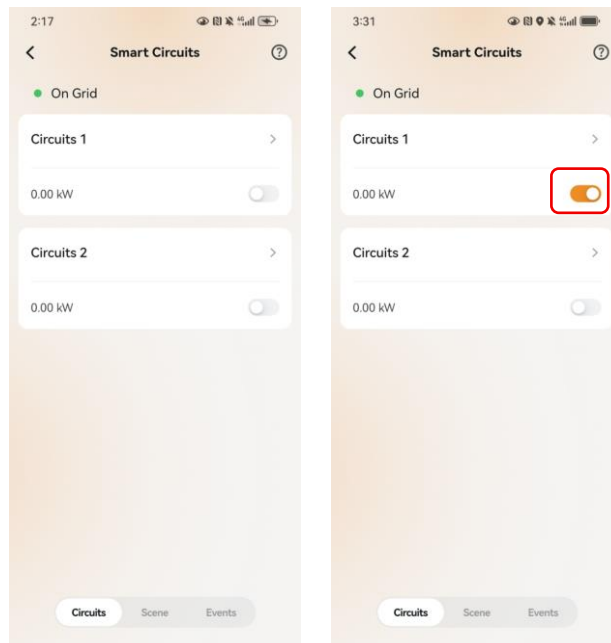
Configure Smart Circuits using the FranklinWH App

- Once system installation and wiring are complete, log in to the app with the installer account. From the home screen, navigate to **Settings > Smart Circuits**.



- The bar at the bottom of the Smart Circuits page contains three icons: **Circuits**, **Scene**, and **Events**. Tap the icon for the component you want to view to access its details.

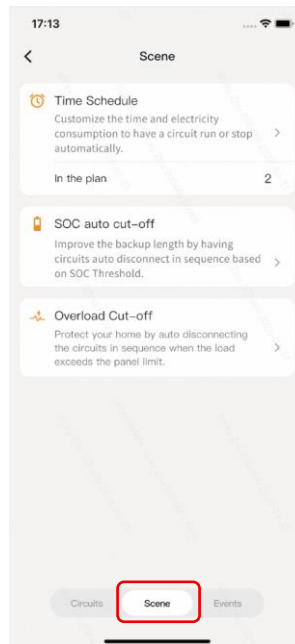
On/Off: Tap the slider to manually turn the circuit on or off.



NOTE

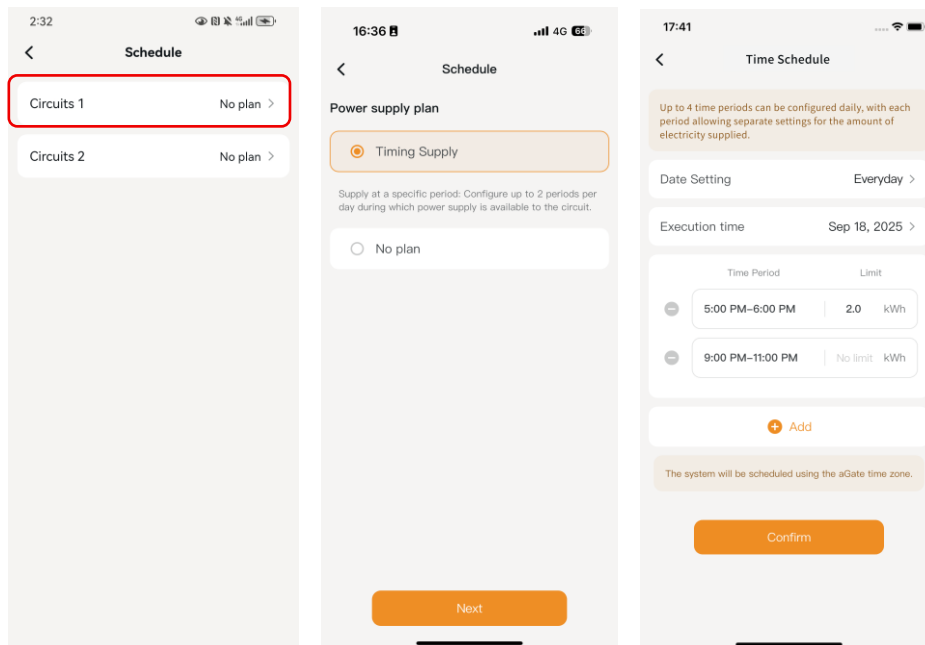
Circuit settings must be in agreement with the physical electrical wiring.

- Tap the **Scene** tab to view the full list of available scenes. You can set the **Time Schedule**, **SOC Auto Cut-off (only off-grid)**, and **Overload Cut-off** scenes for the circuit.



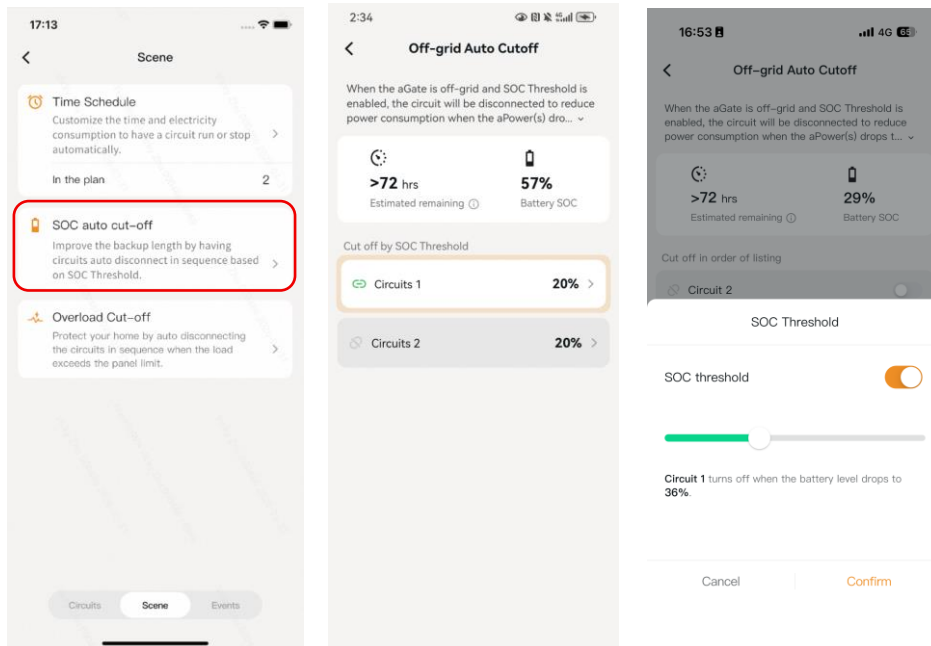
Time Schedule: Customize the time period or electricity consumption to automatically turn the circuit on or off.

You can set the cycle interval and execution time, allowing the system to work intelligently and meet the customer's power consumption requirements.

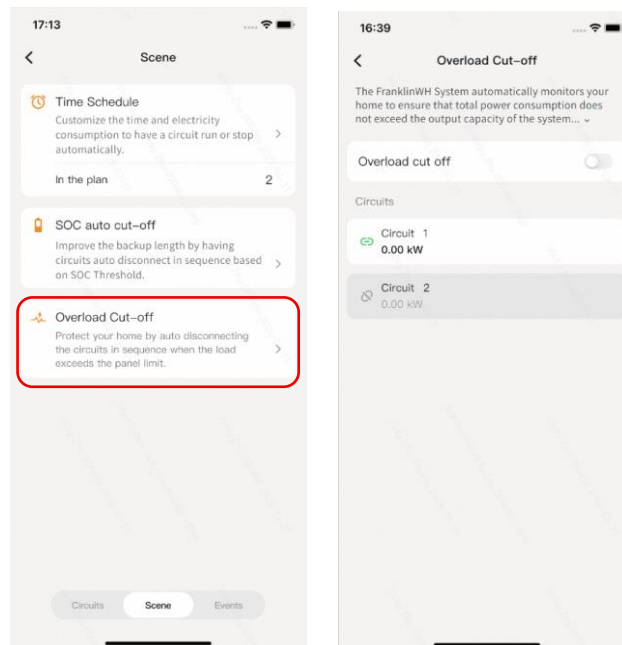



SOC Auto Cut-off (only off-grid): Extend backup hours by automatically disconnecting circuits in sequence based on battery SOC during a grid outage.

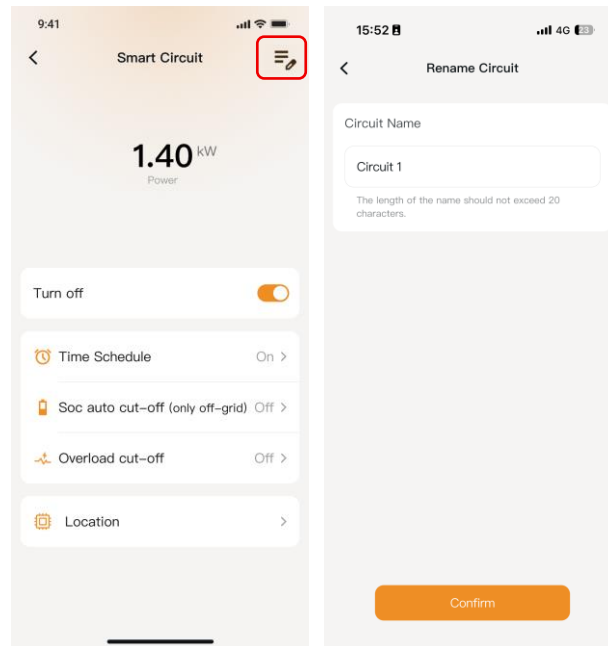
When the aPower battery capacity drops to the set SOC Threshold, each Smart Circuit will be automatically disconnected to reduce power consumption.



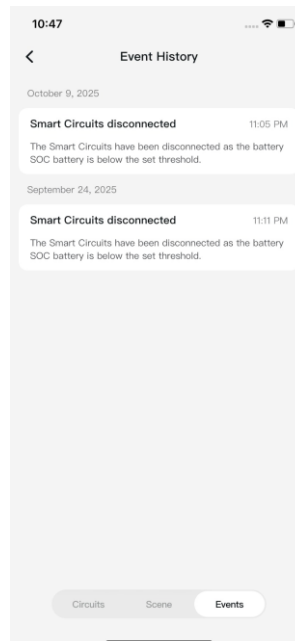
Overload Cut-off: If the load exceeds the main panel's capacity, the system will automatically disconnect circuits to prevent overload damage.



Name: Tap  on the top right, then rename the circuit. Each circuit name may be up to 20 characters.



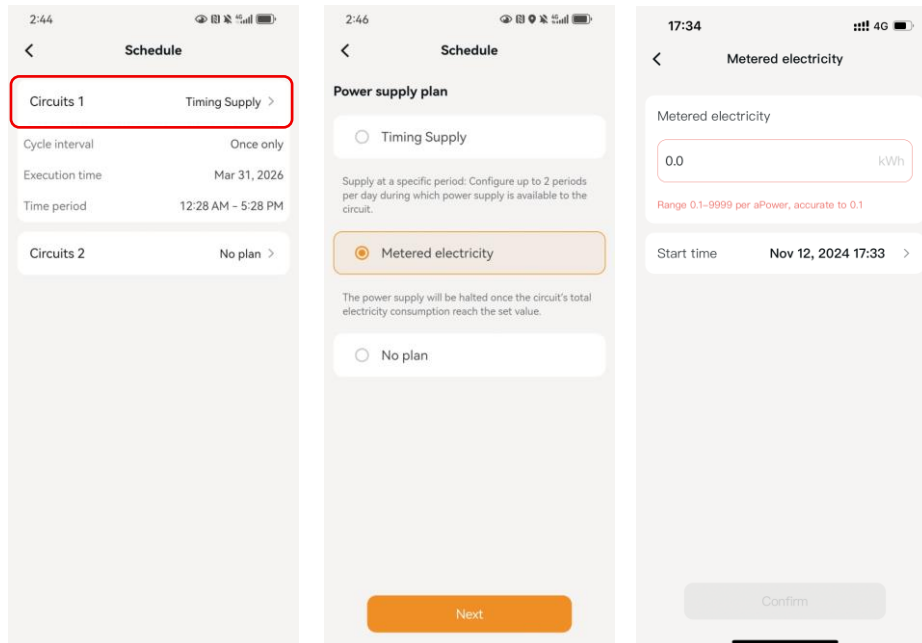
4. Tap the **Event** tab to view the circuit disconnected event logs.



- Repeat the above steps to configure all Smart Circuits.
- Only Smart Circuit 1 supports metered electrical schedule settings.

Go to **Settings > Smart Circuits > Scene > Time Schedule**.

Users can set the pre-charge amount and start time to be used for charging an electric vehicle.



For more information, refer to [FranklinWH Commissioning Guide](#).