FranklinWH Smart Circuit Quick Installation Guide

Version 1.2.02

aPower, SKU: APR-05K13V1-AU
aGate, SKU: AGT-R1V1-AU
Smart Circuits Module, SKU: ACCY-SCV1-AU

Issued on: April 28, 2024

Please visit *FranklinWH Support* for the latest Franklin Home Power documents.

Please read this document carefully to ensure the best reliability of the product and your warranty eligibility. For further information about 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 Franklin Home Power 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

Franklin Home Power (FHP) system is composed of aPower, aGate and other electrical components, and this document applies only to the following products: aPower X, aGate X and Smart Circuit.

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.

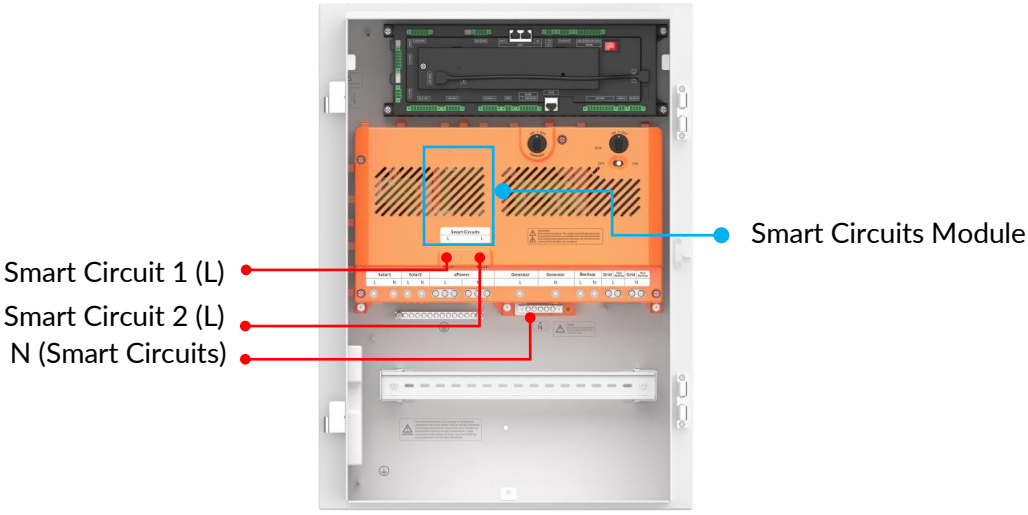
Smart Circuits Overview

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

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

Smart
Use Set the appropriate working time for family appliances, add convenience to your daily life.

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



DANGER

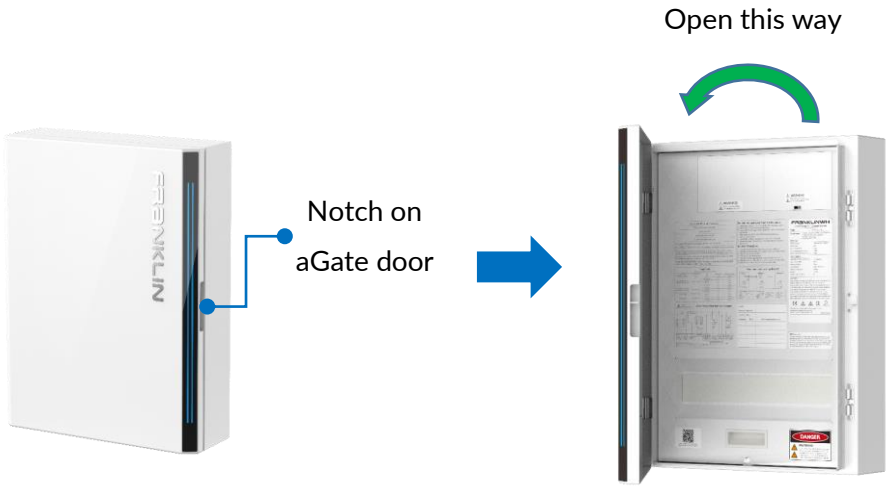
Despite being able to control the Smart Circuits through the FranklinWH App, the remote **OFF** status does not mean the circuit has been physically disconnected. It is important to test the circuit status during the installation process.

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.

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



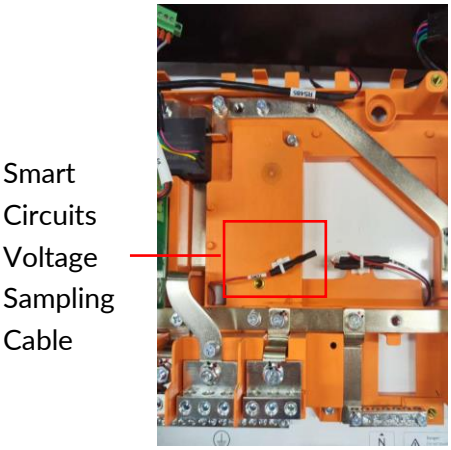
c) **Detach** the door: Gently lift the door panel upward, remove the aGate door after the hinges are separated, and properly store it.

c) Remove the inner panel: Use a Phillips head screwdriver or an electric screwdriver with a Phillips head screw bit. Turn the washer screw fastening the inner panel counterclockwise to remove the screw. Remove the aGate inner panel and properly store it.

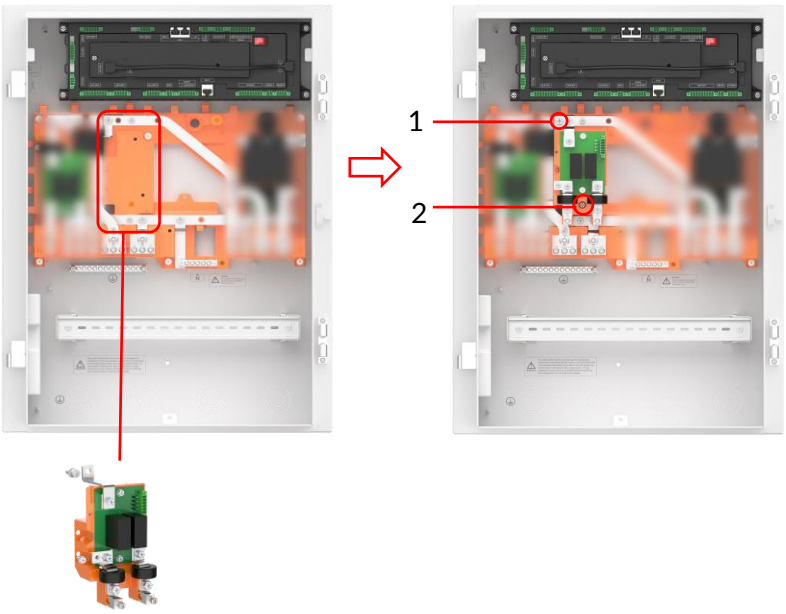
2) Install the Smart Circuits Module

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.

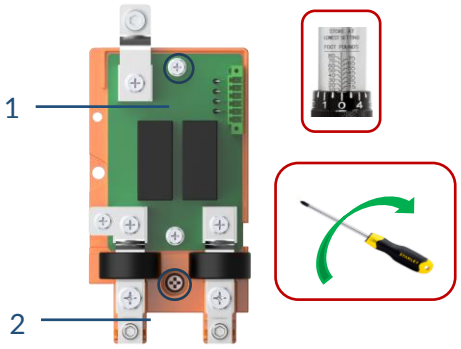
b) Before positioning Smart Circuits Module, cut the cable tie, remove the voltage sampling cable, and set it aside for later use..



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 Nm using a Phillips head screwdriver. Tighten the M5 washer screw at positions 2 to 3 Nm, using a torque screwdriver.



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

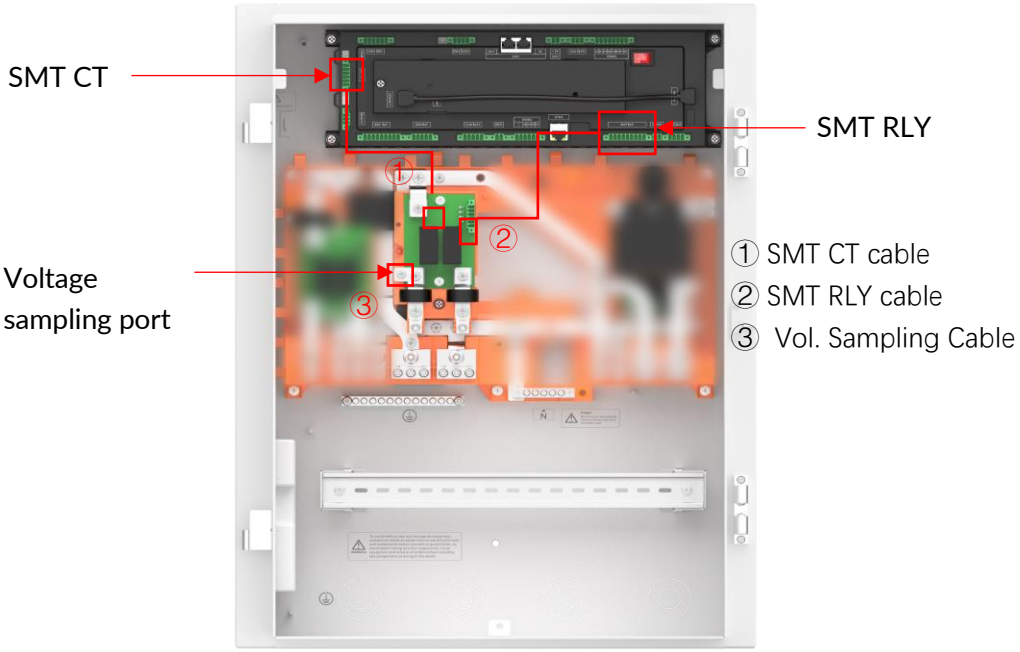
Item	Applicable Cable	Wiring Torque	Stripping Length
Smart Circuits	2.5-10 mm^2	3.9-4.5 Nm	12 mm

e) Wiring the 3 types of cables.

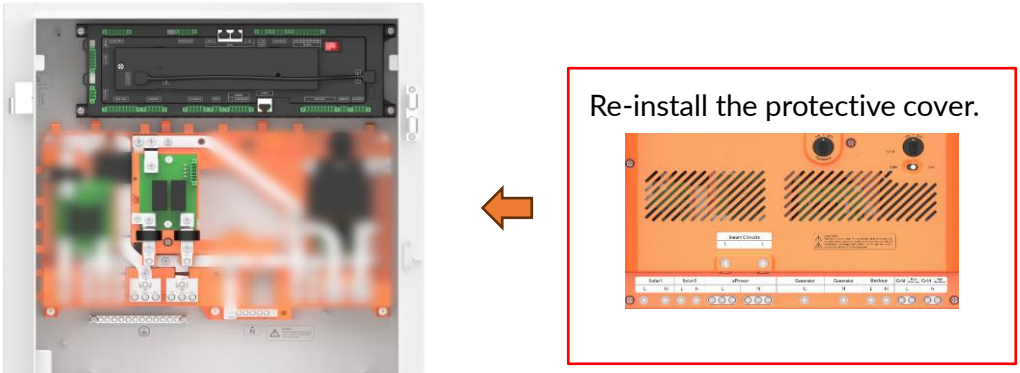
① The SMT CT cable is used for CT current reading. Plug the CT cables into the SMT CT port to complete the connection.

② The SMT RLY is used for power supply to the Smart Circuit. Plug the relay drives cables into the SMT RLY connection port. Plug the other end to the Smart Circuit'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 using a screwdriver, and 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.

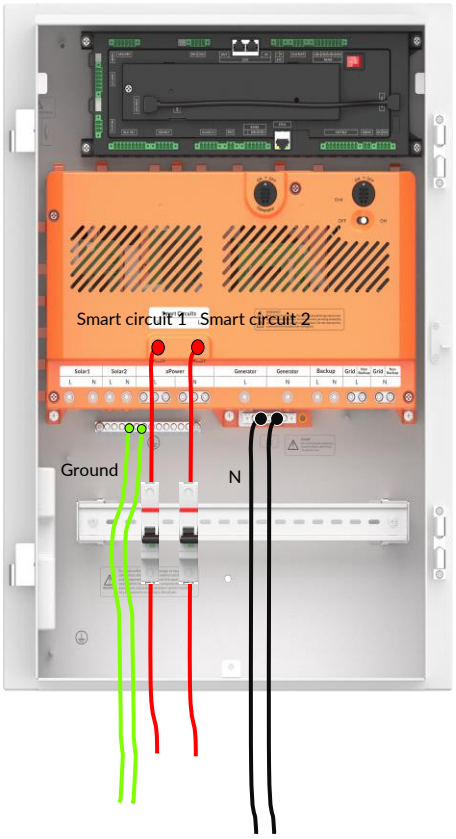
Connecting the Smart Circuits

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 the breaker specifications for the torque values for the breaker output cable screws.

The ground cable does not pass through the circuit breaker.



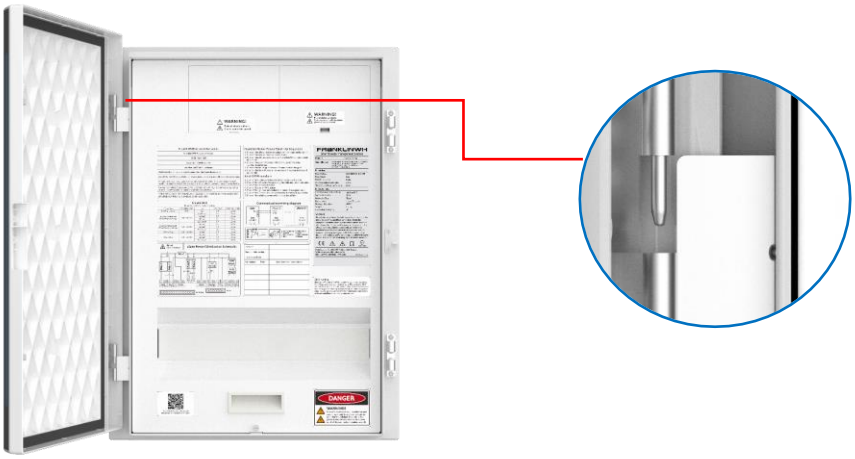
L

N

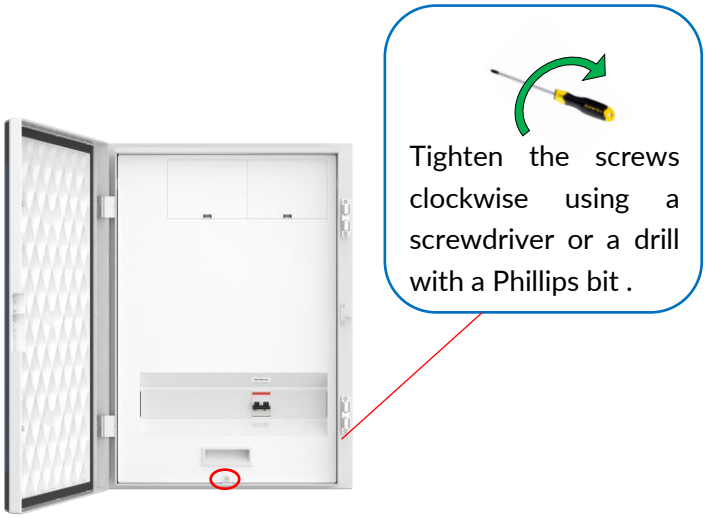
Ground

Completing Installation

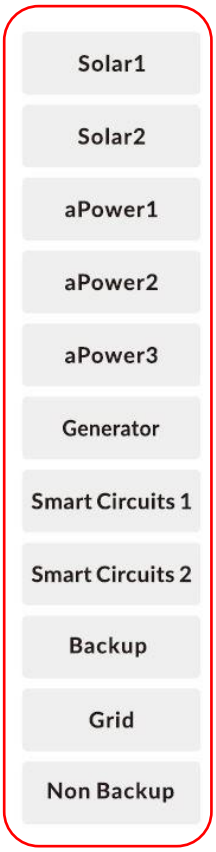
a) Mount the aGate door hinges on the aGate cabinet.



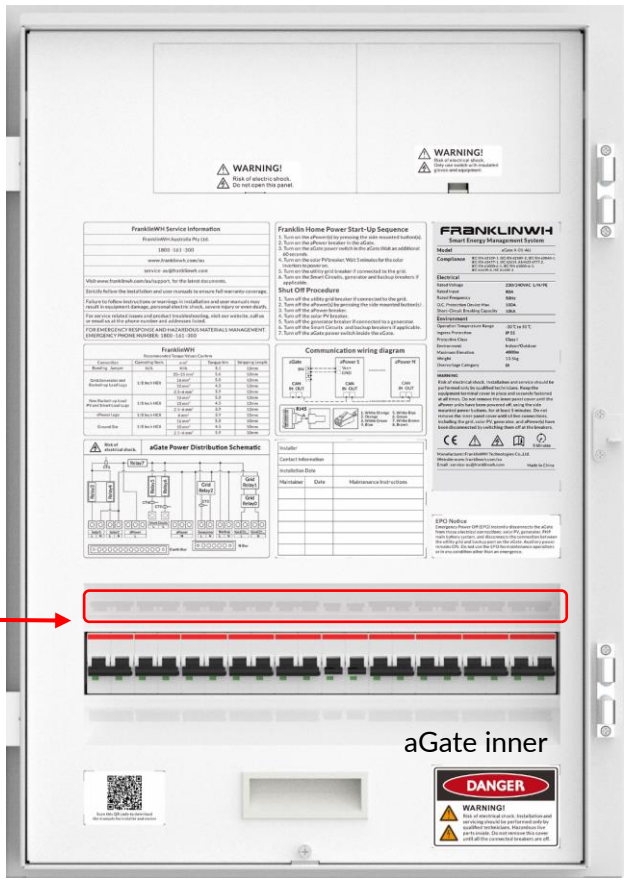
b) Install the inner panel and fasten it by tightening the M5 x 12 combination bolt.



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

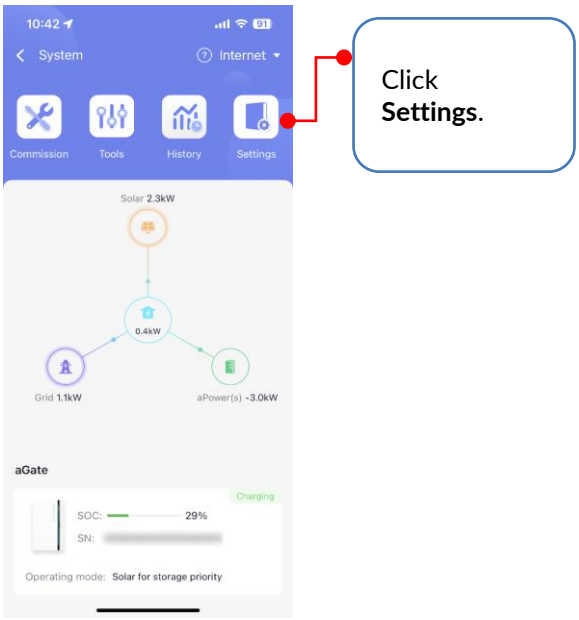
Commission with the FranklinWH App

After the Smart Circuits Module has been installed in the aGate, follow the following steps for adding and commissioning.

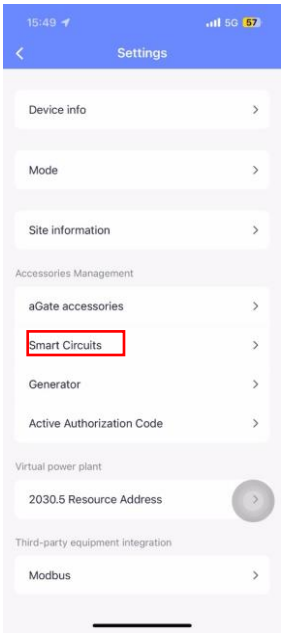
a) Sign in to the FranklinWH App on the installer account.

b) Search for the aGate serial number for which the Smart Circuits Module is to be commissioned in the **Search Device** box, and then click.

c) Click **Settings** in the menu.



d) Click **Smart Circuits**.

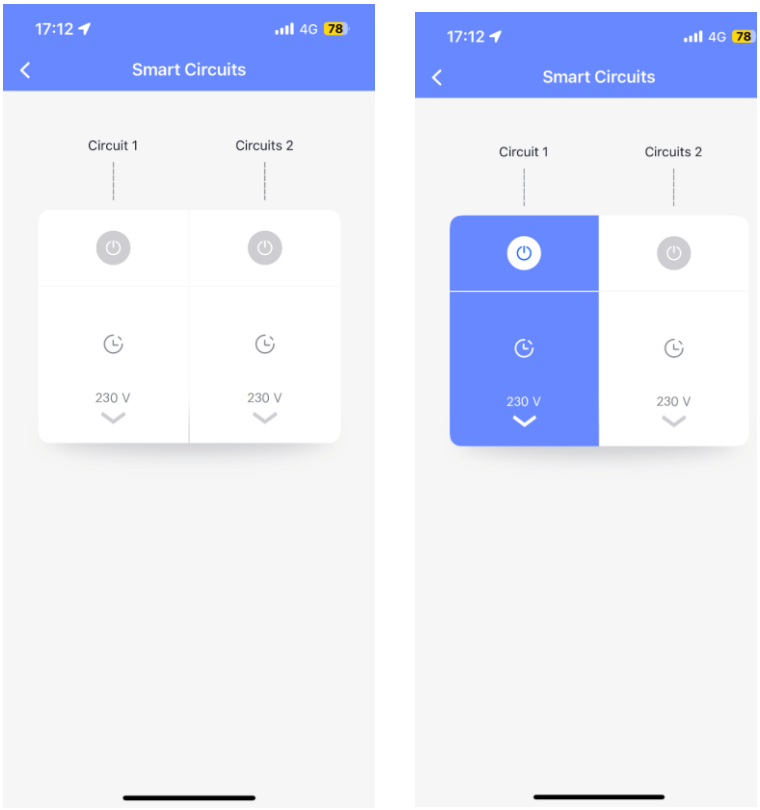


e) Measure the voltage between both Circuit 1 and Circuit 2's individual output terminals and neutral.

Turn on the Smart Circuits breakers and use a multimeter to measure voltages between the Circuit 1 and Circuit 2 output terminals and neutral. If they are 0, the FHP is working normally.

f) Measure the voltage between the Circuit 1 output terminal and neutral.

The Circuit 1 switch button should be in a gray (**OFF**) state, by default. Turn on the Circuit 1 switch on your mobile app and use a multimeter to measure the voltage between Circuit 1 and neutral. If the voltage is 230 VAC, it means that the Smart Circuit relay has been successfully turned on. Otherwise, it means that the Smart Circuit relay is in the open position or working abnormally.



g) Measure the voltage between Circuit 2 and neutral.

The Circuit 2 switch should be in the gray (**OFF**) state, by default. Turn on the Circuit 2 in the app and use a multimeter to measure the voltage between Circuit 2 and neutral. If the voltage is 230 VAC, it means that the Smart Circuit relay has been successfully turned on. Otherwise, the Smart Circuit relay is in the open position or working abnormally.