

SAVANT POWER SYSTEM

Savant Power System Deployment Guide - Power & Light App

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This document guides the installer through the complete process of deploying and configuring a Savant Power System using the Savant Power & Light app, including:

- Director and Power System wiring
- Pairing Power Modules using On-Device Onboarding or the Power & Light App

If Applicable Steps:

- Discovery of the Director
- Uploading and Downloading the Configuration from the Savant Power Director
- Integrating a Microgrid, Battery, or Generator
- Creating Energy Scenes
- Customer Perspective - Savant App Initial Log-in

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Important Safety Information - Read First



Before installing, configuring, or operating any equipment, Savant recommends that each dealer, integrator, installer, etc. access and read all relevant technical documentation. Savant Power technical documentation can be located by visiting [Savantpower.com](https://www.savantpower.com). Vendor documentation is supplied with the equipment.

Read and understand all safety instructions, cautions, and warnings in this document and the labels on the equipment.


Safety Classifications In this Document

NOTE:	Provides special information for installing, configuring, and operating the equipment.
 IMPORTANT!	Provides special information that is critical to installing, configuring, and operating the equipment.
 CAUTION!	Provides special information for avoiding situations that may cause damage to equipment.
 WARNING!	Provides special information for avoiding situations that may cause physical danger to the installer, end user, etc.

Electric Shock Prevention

 ELECTRIC SHOCK!	The source power poses an electric shock hazard that has the potential to cause serious injury to installers and end users.
 ELECTRICAL DISCONNECT:	The source power outlet and power supply input power sockets should be easily accessible to disconnect power in the event of an electrical hazard or malfunction.

Weight Injury Prevention

 WEIGHT INJURY!	Installing some of the Savant equipment requires two installers to ensure safe handling during installation. Failure to use two installers may result in injury.
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Safety Statements

All safety instructions below must be read, understood, and carefully followed under all applicable circumstances when working with any Savant equipment.

1. **Follow all input power ratings marked on product near power input!**
2. If fuse replacement is required, replacement fuse should match fuse rating marked on the product.
3. Do not use equipment near water.
4. Clean only with dry cloth.
5. Do not block any ventilation openings or install near any heat sources such as heat registers, stoves, radiators, amplifiers, etc.
6. Refer all servicing to qualified service personnel. Servicing is required when any part of the apparatus has been damaged in any way, or fails to operate normally for any reason.
7. Use only attachments/accessories specified by the manufacturer, following all relevant safety precautions for any such attachments/accessories.
8. For applicable equipment, use the included power cord with the grounding prong intact to insure proper grounding of the device.
9. If the provided plug does not fit the desired outlet, contact a licensed electrician to replace the obsolete outlet.
10. Protect any power cord from being walked on, pinched, strained, or otherwise potentially damaged, especially at the outlet or device connections.
11. Disconnect any outlet powered apparatus from its Power Source during lightning storms or when unused for long periods of time.
12. To completely disconnect equipment from AC mains power, disconnect the power supply cord plug from the AC receptacle on the device.
13. For any hardwired or fixed in-wall apparatus, carefully follow all wiring diagrams and instructions. All electrical wiring and servicing should be performed by a properly licensed electrician.

1. Before You Begin

Before completing the steps listed in this document, it is important to understand its place within the Savant Power ecosystem. This document covers all Power & Light app aspects of the **Configuration** phase of installing a Savant Power System. This document assumes the reader has read all documentation associated with the equipment to be installed, and all documentation listed below before continuing:

Savant Documentation

This document assumes the installer has read and completed the applicable steps within the following Savant documentation. Complete only the documentation applicable to the equipment installed:

Power

- [009-2264 Savant Power System Design Guide](#)
- [009-2265 Savant Power System Design Worksheet](#)
- [009-2222-01 Savant Power System Deployment Guide - Sol-Ark](#)
- [009-2227 Savant Power System Deployment Guide - Schneider](#)

Third Party Documentation

The following are third party installation manuals relevant to the type of inverter to be installed.

Manufacturer	Manual
Tesla	Tesla PowerWall 2
Sonnen	Operation and user manual sonnen eco Gen 3.1
SolarEdge	SolarEdge System Installation Guide

Products

The following items are required for deploying a Savant Power System using the Savant Power & Light app:


- Savant Power Director (HST-DIRECTOR)
- iOS or Android Device
- Savant Power Modules (GPM-QP2R20120-21, GPM-QP1R30240-21, GPM-CP1R60240-21)

- OPTIONAL:**
- CAT5 or Higher Ethernet Cable
- Uninterruptible Power Supply (UPS)
- SmartEnergy Monitor (SEM-2015)
- Panel Bridge Controller (PBC-1000)
- Savant Smart Controller (SSC-02485)

2. Introduction

This document describes the process of using the Savant Power & Light App to deploy and configure a Savant Power System. This process is divided into two types of **Onboarding**. Once either process is complete, the Savant Power & Light app can optionally be used for further configuration.

- **Device Onboarding** uses the **Pair** button on each Power Module to configure how the circuits it monitors will appear within the Savant App and pair all Power Modules to the Director. Afterwards, the Savant Power & Light app can optionally be used to test circuits and configure a Power Source if applicable.
- **App Onboarding** is the process of using the Savant Power & Light app to pair Power Modules to the Director. Then additional settings including Power Sources, Energy Scenes, and Dedicated Circuits are configured within the app.

 **IMPORTANT!:** Follow either **OPTION 1: Device Onboarding** or **OPTION 2: App Onboarding**. Then, for further optional configuration, follow the sections listed in [2.3 Power Source & Energy Scene Configuration](#):

2.1. OPTION 1: Device Onboarding

1. Install Director
See [Director Setup](#)
2. Complete Device Onboarding
See [Device Onboarding](#)

 **IMPORTANT!:** Savant Power Systems without Power Sources require no further configuration. See [Savant App Integration](#).

3. Prepare for the Savant Power & Light App (Optional)
See [Power & Light App Transition \(Optional\)](#)

2.2. OPTION 2: App Onboarding


1. Install Director
See [Director Setup](#)
2. Complete App Onboarding
See [OPTION 2: App Onboarding](#)
3. Update Software & Firmware
See [Appendix A: Software & Firmware Update](#)

2.3. Power Source & Energy Scene Configuration

Once either **OPTION 1: Device Onboarding** or **OPTION 2: App Onboarding** are completed, complete the Power & Light App deployment process according to the type of equipment installed.

NOTE: These steps can be completed without physical access to the equipment as long as all previous steps have been completed and the Director has access to the network.

- 1. Get Configuration from Director
See [Get Config](#)

 **IMPORTANT NOTE:** **Get Config** is only required when configuring a Savant Power System that has already been deployed previously.

- 2. Review Energy Dashboard
See [Dashboard](#)
- 3. Test Functionality
See [Test Circuits](#)
- 4. Add Power Sources
See [Add Power Source \(If Applicable\)](#)
- 5. Configure Dedicated Circuits.....
See [Configure Dedicated Circuits \(If Applicable\)](#)
- 6. Create Energy Scenes
See [Create Energy Scenes \(Optional\)](#)
- 7. Upload Configuration to Director
See [Upload Config](#)

3. Director Setup

The Director must be mounted, powered on, and have a connection to the Local Area Network or used as a hotspot before continuing Savant Power & Light App deployment.

Overview

For an overview on the specifications and ports of the Director, see the applicable **Quick Reference Guide**.

Installation

1. Mount the Director in a location chosen during the design phase.
2. Screw in the wifi and bluetooth antennas to the 3 side panel ports as shown.
3. Connect the Director to the local area network using a CAT5 or higher ethernet cord from the ethernet port to the main switch.
⚠️ IMPORTANT!: For wireless networks, Complete [App Onboarding](#), following section [5.4 Wireless Setup \(If Applicable\)](#).
4. For Homes without a PoE ethernet switch or that use Wifi, connect the 5V DC to a **Universal Power Supply**.

Director Hotspot

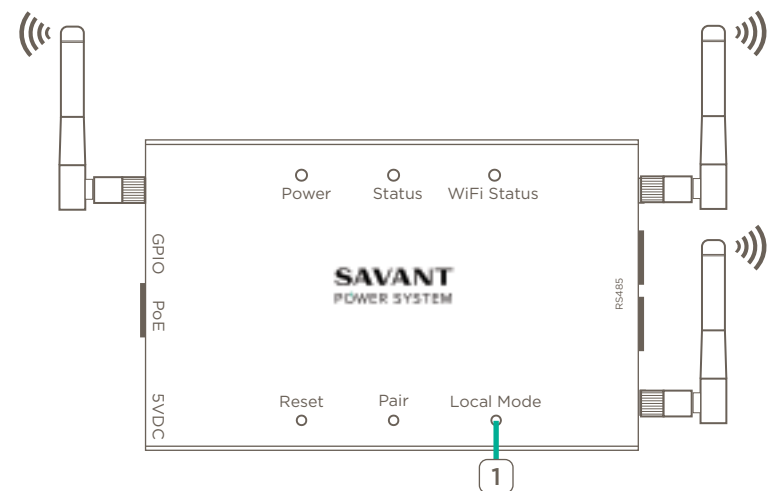
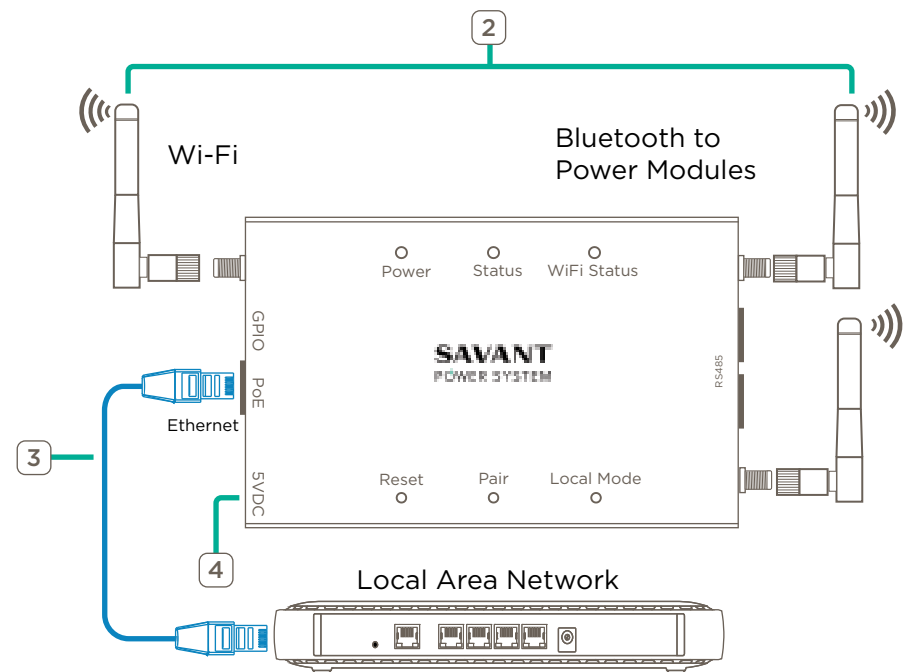
⚠️ IMPORTANT: Only complete this section if an existing wired or wireless network is not available.

The Director must have an internet connection. For locations without an existing local area network, the Director can be placed into **Local Mode** and used as a hotspot.

1. Press and hold the **Local Mode** button on the Director for 3 seconds until the status LED is solid amber.
2. On the iOS device, navigate to **Wireless Networks**.
3. Connect to the wireless network titled **SavantAP<DirectorUID>**
Example: SavantAP001aae469f9e0000
4. Enter the wireless network password.

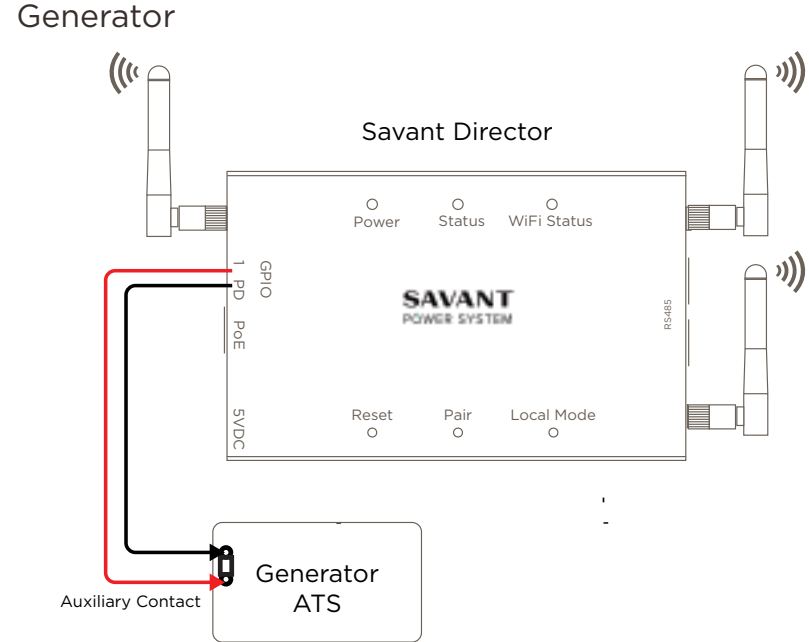
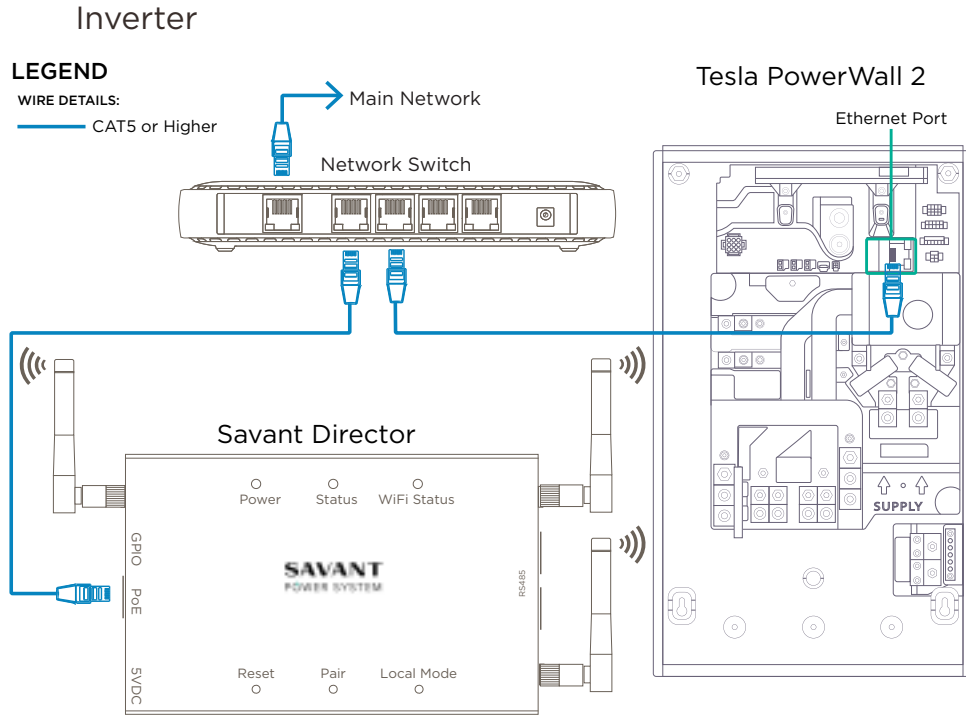
NOTES:

- The default password is **12345678**
- The Director UID is located on the front of the device.
- The Hotspot will timeout after 30 minutes. Press and hold Local Mode again to re-enable it.



3.1. Power Source Communication Wiring (If Applicable)

Follow the applicable diagram below to establish communication between the Director and a Power Source.



⚠ IMPORTANT NOTES:

- This image represents a Tesla PowerWall connecting to a Savant Director. Ethernet port location will vary between inverter types.
- For **Sol-Ark** inverters, the inverter communications wiring must already be configured per the [Savant Power System Deployment Guide - Sol-Ark & HomeGrid](#).
- For **Schneider** Inverters, the inverter communications wiring must already be configured per the [Savant Power System Deployment Guide - Schneider & Fortress](#).

4. Device Onboarding

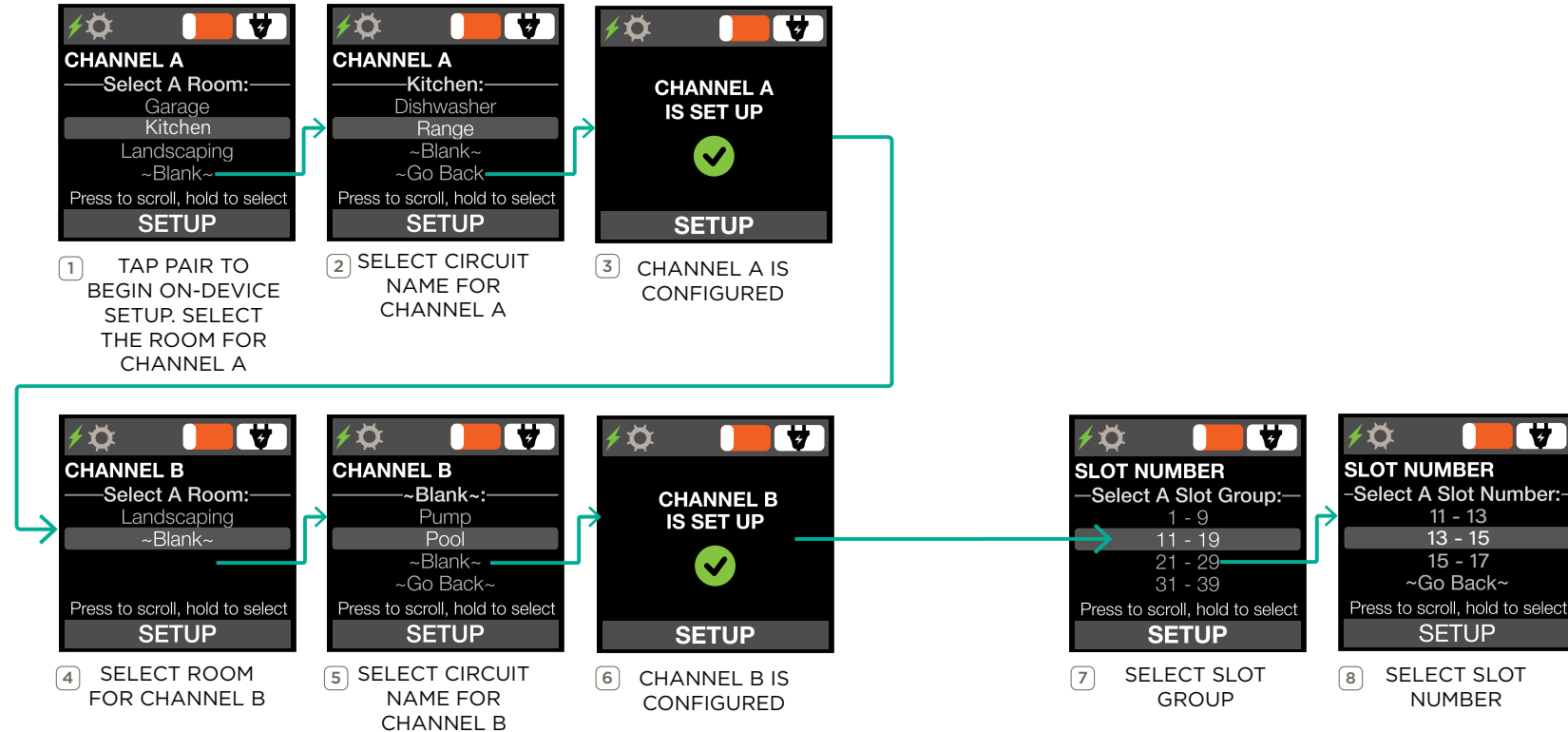
Once wired and installed as according to the Savant Power System Deployment Guide, apply power to all breaker panels containing Power Modules. The LCD screen for all Power Modules will light up. Once all Power Modules are powered on fully, their Module Data must be configured.

4.1. Configure Channel & Slot Number

Module Data consists of three parts:

Slot	The starting slot a Power Module occupies within the breaker panel.
Circuit Name	Name of each circuit controlled by its respective Power Module Channel.
Room Name	The name of the room the circuit provides power to as it is represented in the Savant App.

Room and Circuit names are configured on a per-channel basis. A **Channel** is the relay within Power Module that controls the circuit it is wired to. Dual relay Power Modules have **Channel A** and **Channel B**, while single relay modules have only **Channel A**. The image below shows the process of configuring the Room Name, Circuit Name, and Slot Numbers of a dual relay Power Module.



4.2. Pair Power Modules

Once the Power Modules have been configured, they are ready to be paired to the Director. Pairing allows the Director to communicate with the Power Modules. To complete the pairing process, follow the steps below:

1. For each Power Module, press the **PAIR** button for 3 seconds, then release the button.
2. Confirm that the **Gear** icon displaying on the LCD screen.
3. On the front of the Director, firmly press the PAIR button.
4. While the Director is in Pairing Mode the Status LED will blink red and green. Pairing Mode may last up to 5 minutes. For more information on PAIR button functions, see [Appendix B: Power Module Information](#).
5. Pairing is complete when the status LED of the Director is solid green and all paired Power Modules display the Bluetooth icon.



IMPORTANT NOTES!:

- No further configuration is required. However, before continuing to any section for further configuration using the Power & Light App, complete section **4.3 Power & Light App Preparation**.
- If the Director cannot access the network during pairing, the Director status LED will blink green. For sites without a local area network, configure the director for **Local Mode** (See [Director Hotspot](#)).

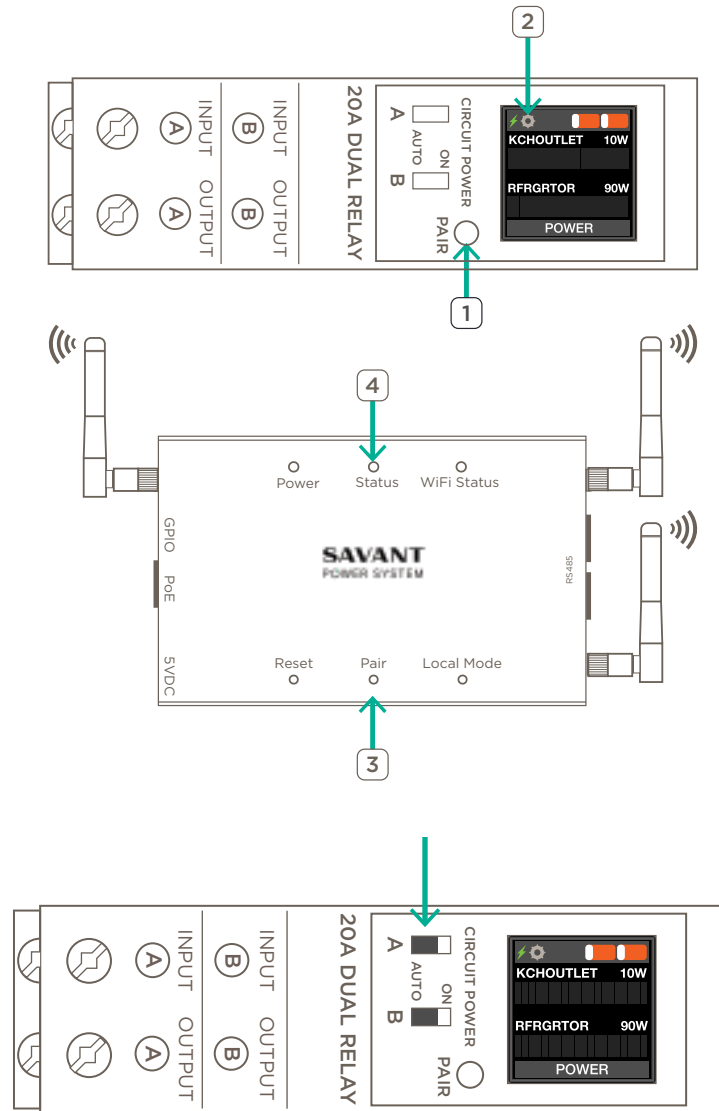
4.3. Power & Light App Transition (Optional)

If after Device Onboarding further configuration is required for the Savant Power System, first put the system into a functional state.

- Set all Power Module Circuit Power switches to **ON**.
- Confirm all loads connected to Power Modules are energized.
- Connect the Director to a wired or wireless network.

Once preparation is complete, complete the following sections in order:

1. [Create Home](#)
2. [Add Photo](#)
3. [Discover Devices](#)
4. **OPTIONAL:** [Wireless Setup \(If Applicable\)](#)
5. [Get Config](#)
6. [Dashboard](#) and all applicable sections afterwards.

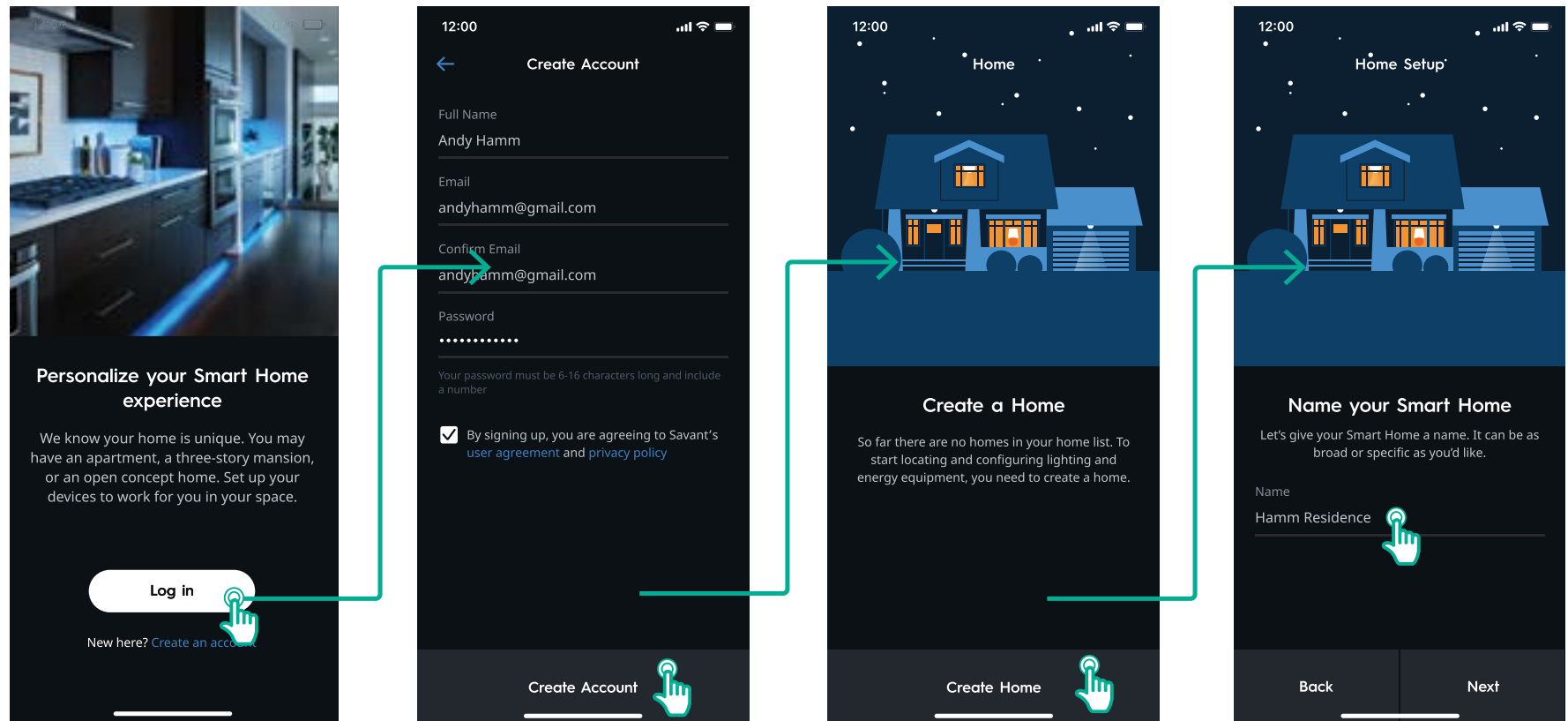


5. App Onboarding

App Onboarding is the process of pairing and configuring Power Modules using the Power & Light App only. The Savant Power & Light app must be installed on an iOS or Android device on the same network as the Savant Power Director. Using the App Store, search for Savant Power & Light and tap install. When the app is downloaded, launch the app, tap **Log In**. Then complete the steps below:

5.1. Create Home

A Home is a representation of the Savant Power System in the Power & Light App.



1 TAP CREATE AN ACCOUNT OR LOG IN WITH AN EXISTING ACCOUNT

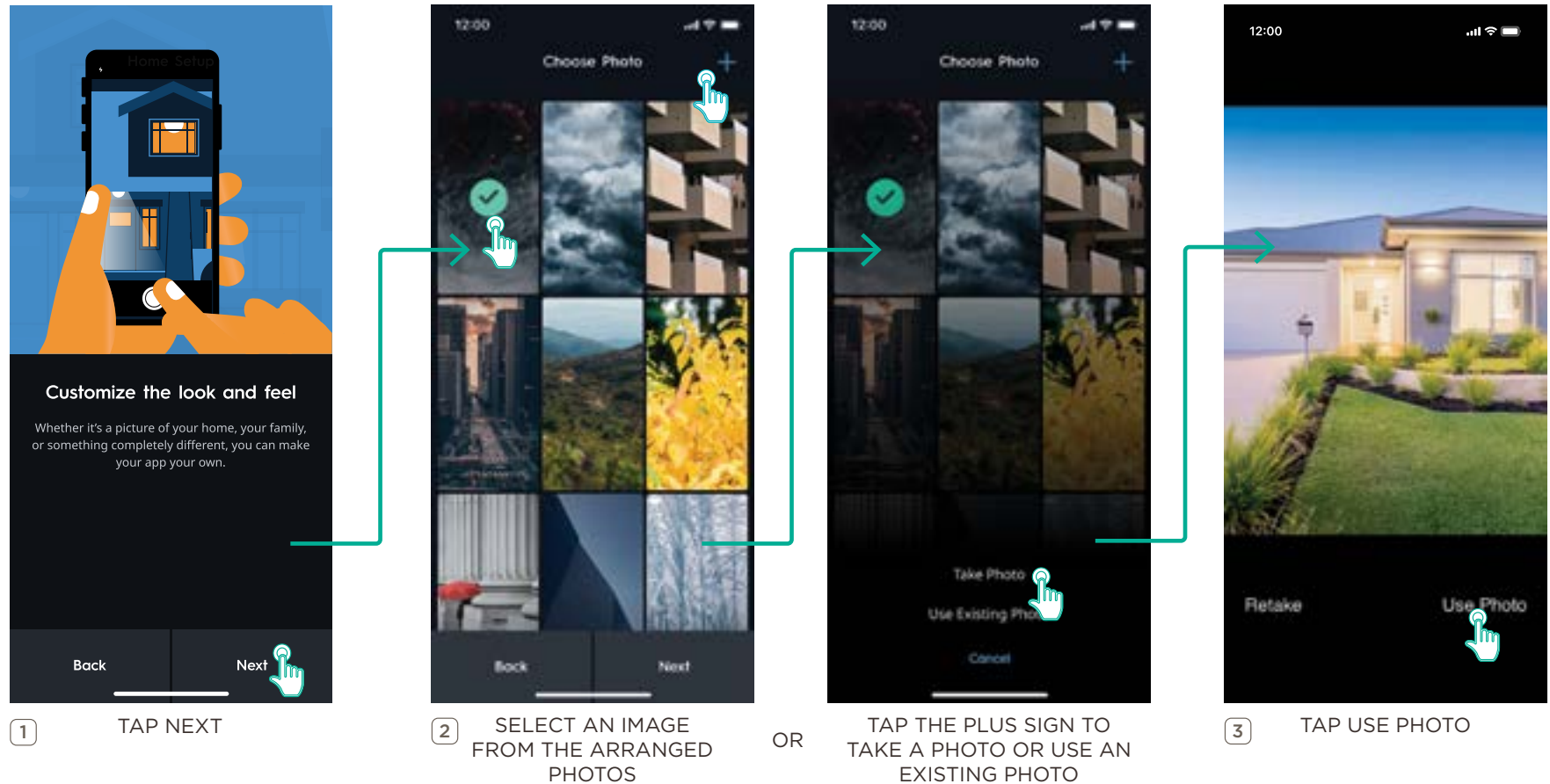
2 FILL IN ACCOUNT DETAILS AND AGREE TO THE USER AGREEMENT BEFORE TAPPING CREATE ACCOUNT

3 TAP CREATE HOME

4 NAME THE HOME AND TAP NEXT.

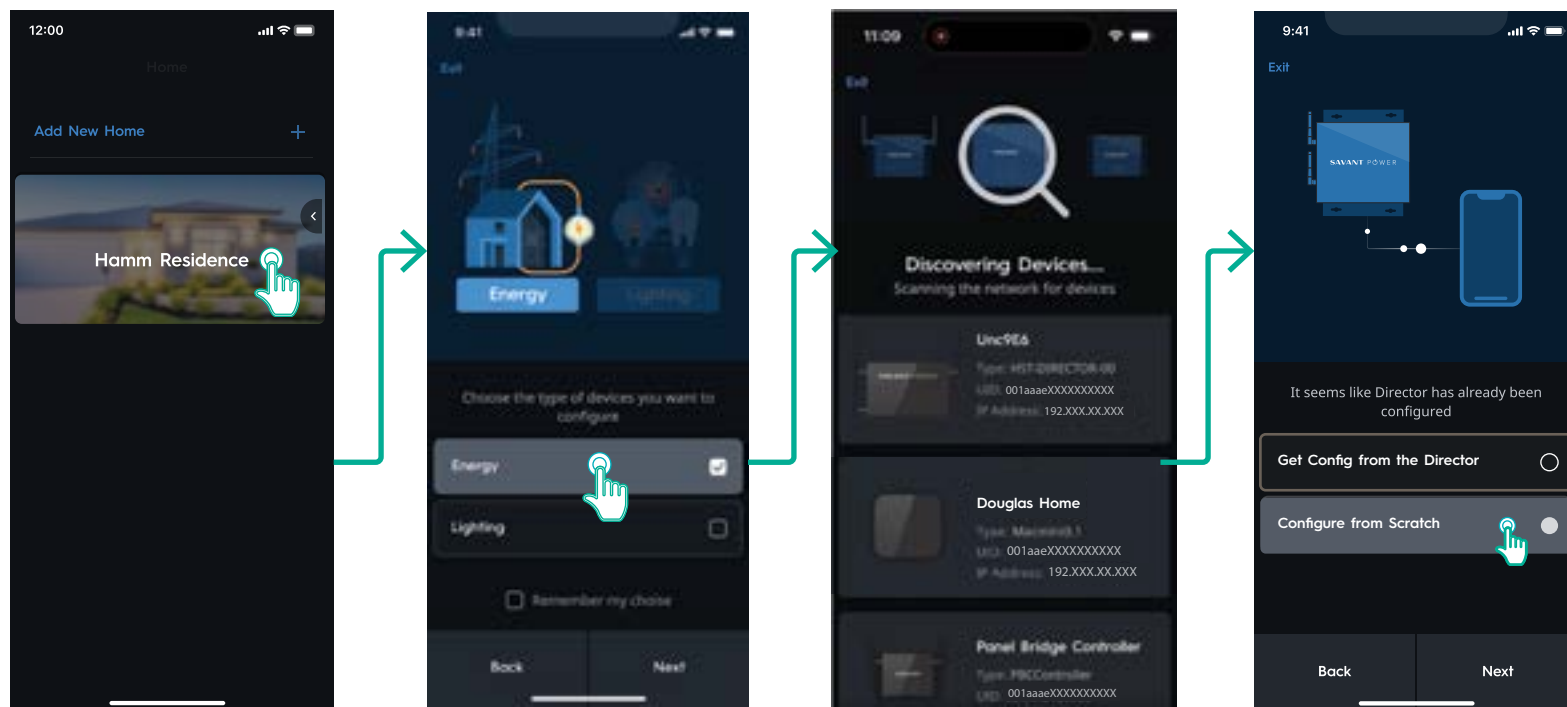
5.2. Add Photo

A photo represents the Home within the Power & Light App. The Power & Light app will automatically prompt the user to use or create a photo.



5.3. Discover Devices

The Director is the main **Device** the Savant Power & Light app communicates with. **Device Discovery** is the process of using the Savant Power & Light app to discover the Director and other devices to be added to config. This step is required each time the Savant Power System is accessed using the Savant Power & Light app.



1 TAP ON THE HOME

2 SELECT THE TYPE OF DEVICES TO BE CONFIGURED AND TAP NEXT.

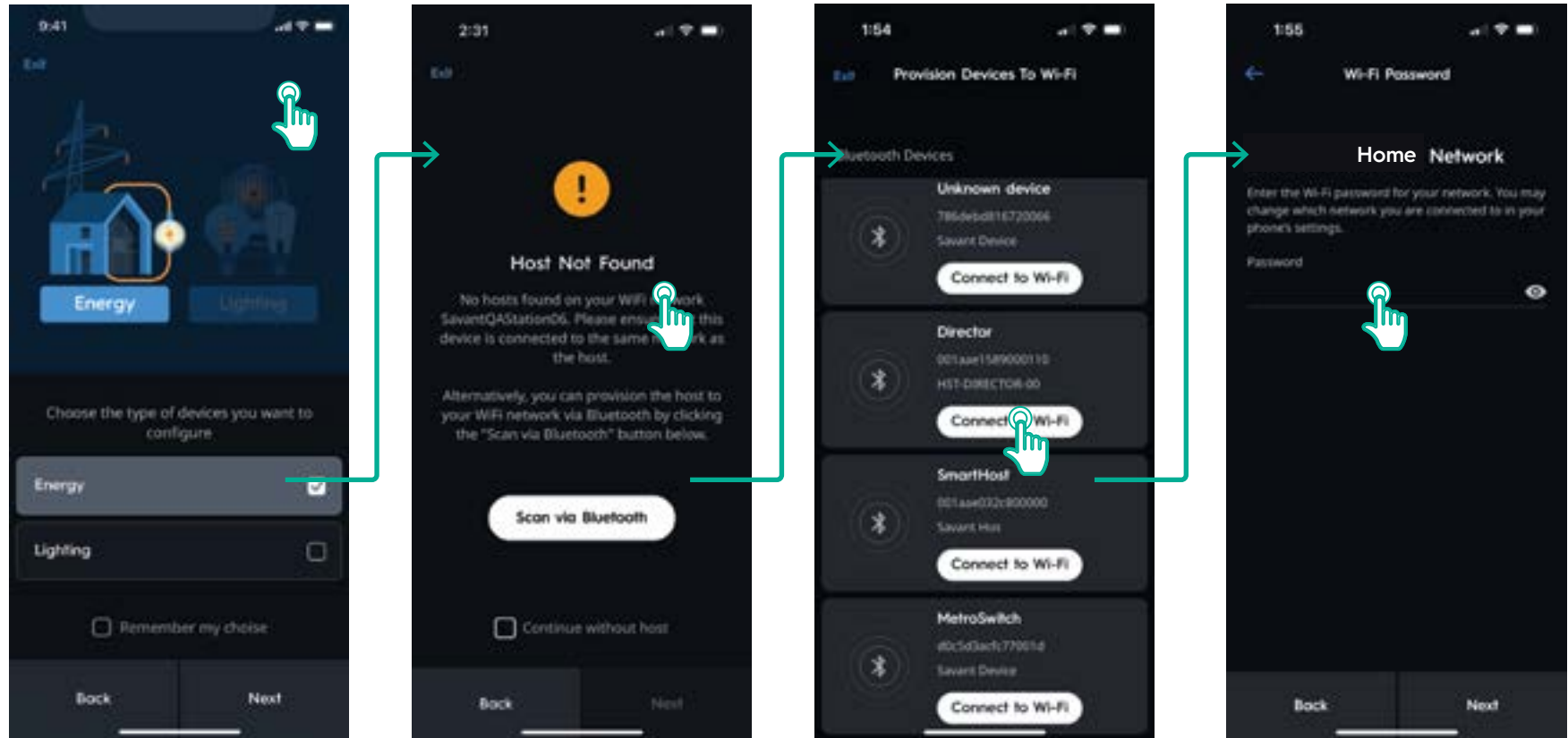
3 THE POWER & LIGHT APP AUTOMATICALLY SCANS FOR ALL DEVICES ON THE NETWORK.

4 CHOOSE CONFIGURE FROM SCRATCH

NOTE: After this process the user may be prompted for a software update. For more information, see [Appendix A: Software & Firmware Updates](#).

5.4. Wireless Setup (If Applicable)

For new homes requiring the Director communicate using the wireless network, make sure the iOS or Android device is on the same network the Director will be connected to and has the Savant Power & Light app installed. The Power & Light App will automatically query the network for all Savant devices. Then follow the steps below.



1 SELECT THE TYPES OF DEVICES TO BE CONFIGURED

2 WIFI ONLY: TAP SCAN VIA BLUETOOTH

3 SEARCH FOR THE DIRECTOR AND TAP CONNECT TO WI-FI

4 ENTER THE WIFI NETWORK PASSWORD

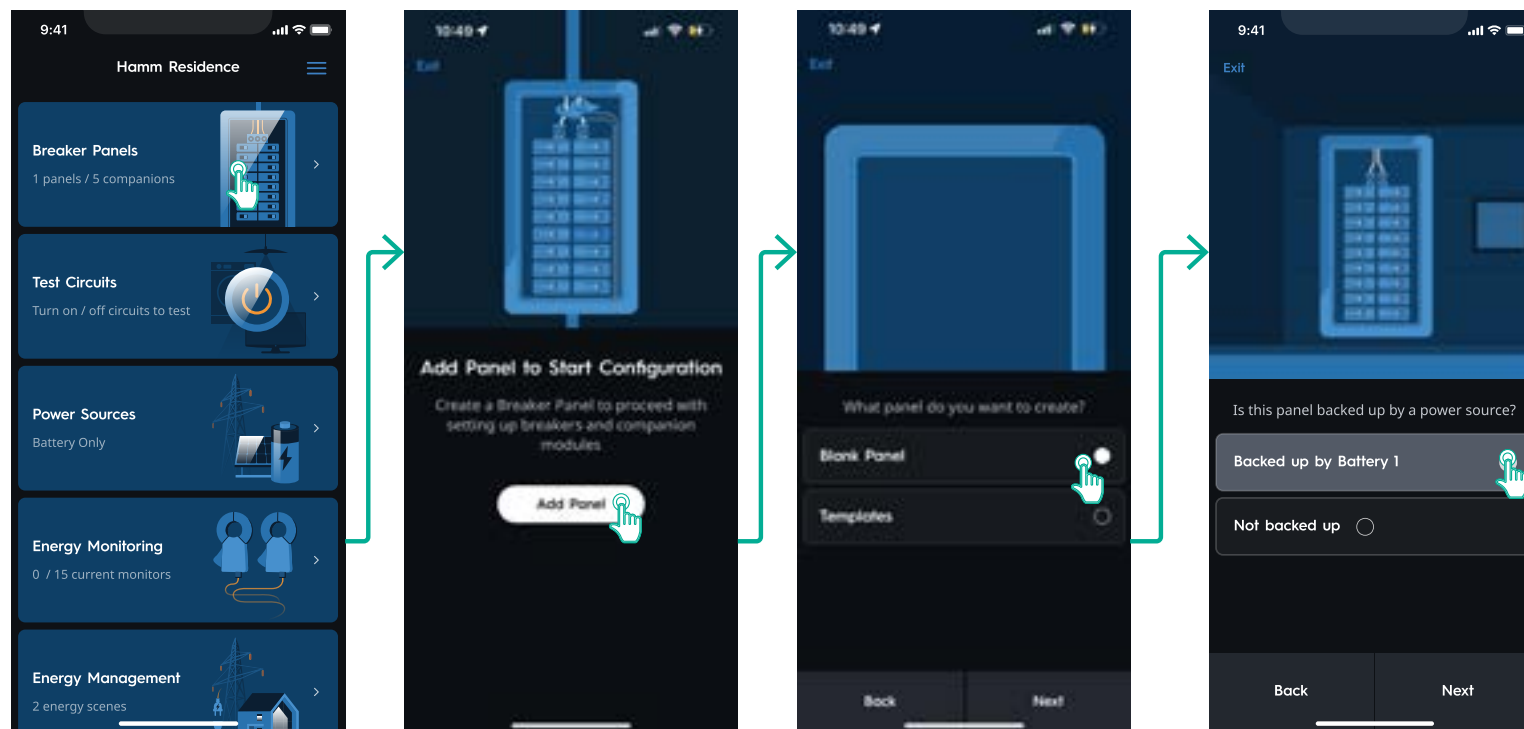
NOTE: The Director can be manually onboarded to a different Wifi network by tapping the **Menu** icon on the **Dashboard** screen and selecting **Provision To Wifi**.

5.5. Add Breaker Panel

Panels with Power Modules are represented as **Breaker Panels** within the Config. Breaker Panels contain the slot and channel number for all monitored circuits in the Power & Light app. This section describes the process of creating a Breaker Panel. These steps are identical for any type of distribution panel, the only difference is the information entered.



TIP: All of settings configured after step 4 are referenced in [Appendix D: Breaker Panel Settings](#) and can be changed at any time by swiping left on an existing breaker panel and tapping the pencil icon.



1 TAP BREAKER PANELS

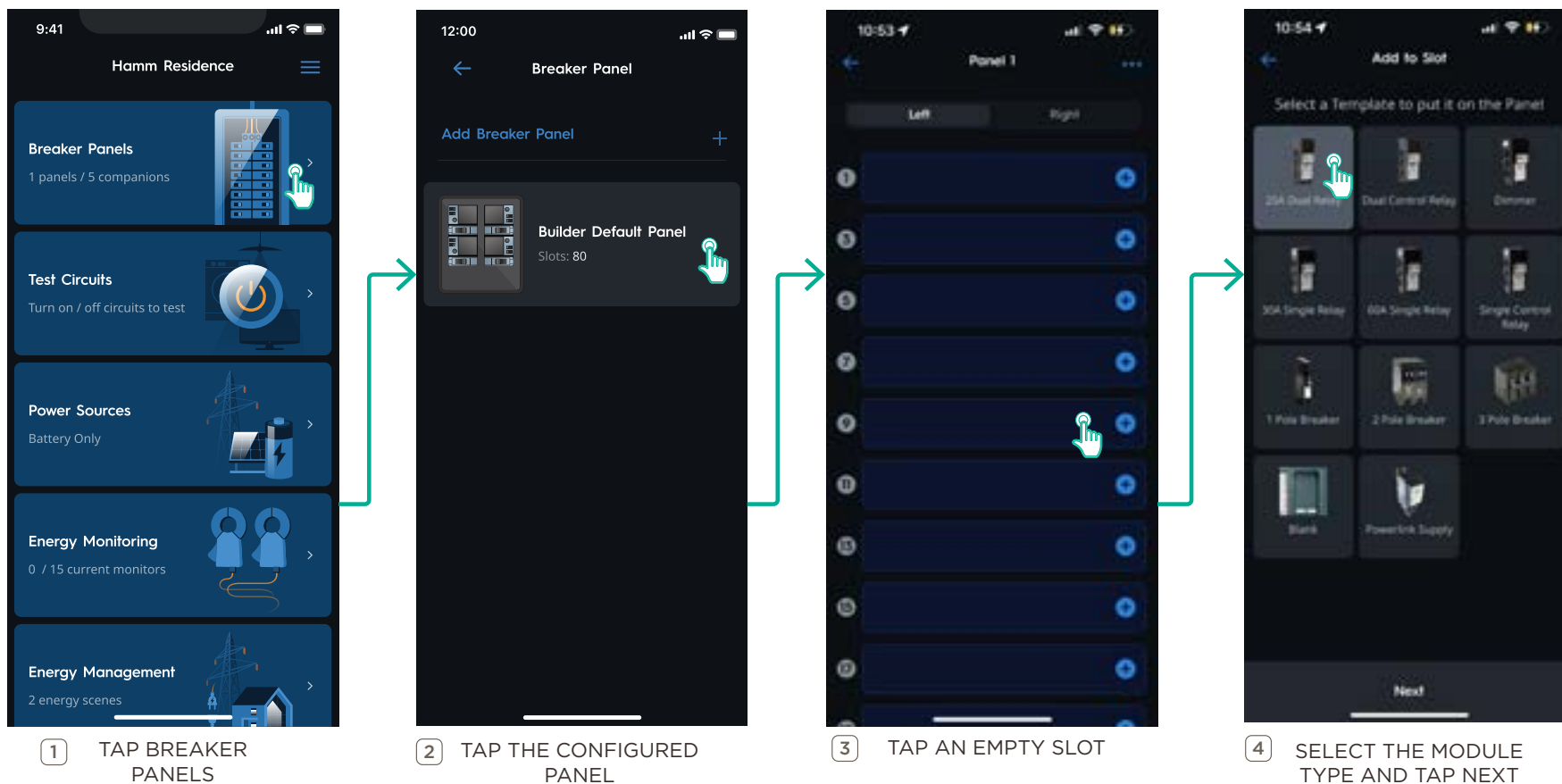
2 TAP ADD PANEL

3 SELECT EITHER BLANK PANEL OR TEMPLATES

4 IF APPLICABLE, CHOOSE THE POWER SOURCE TO PROVIDE BACKUP POWER

5.6. Add Breakers & Modules

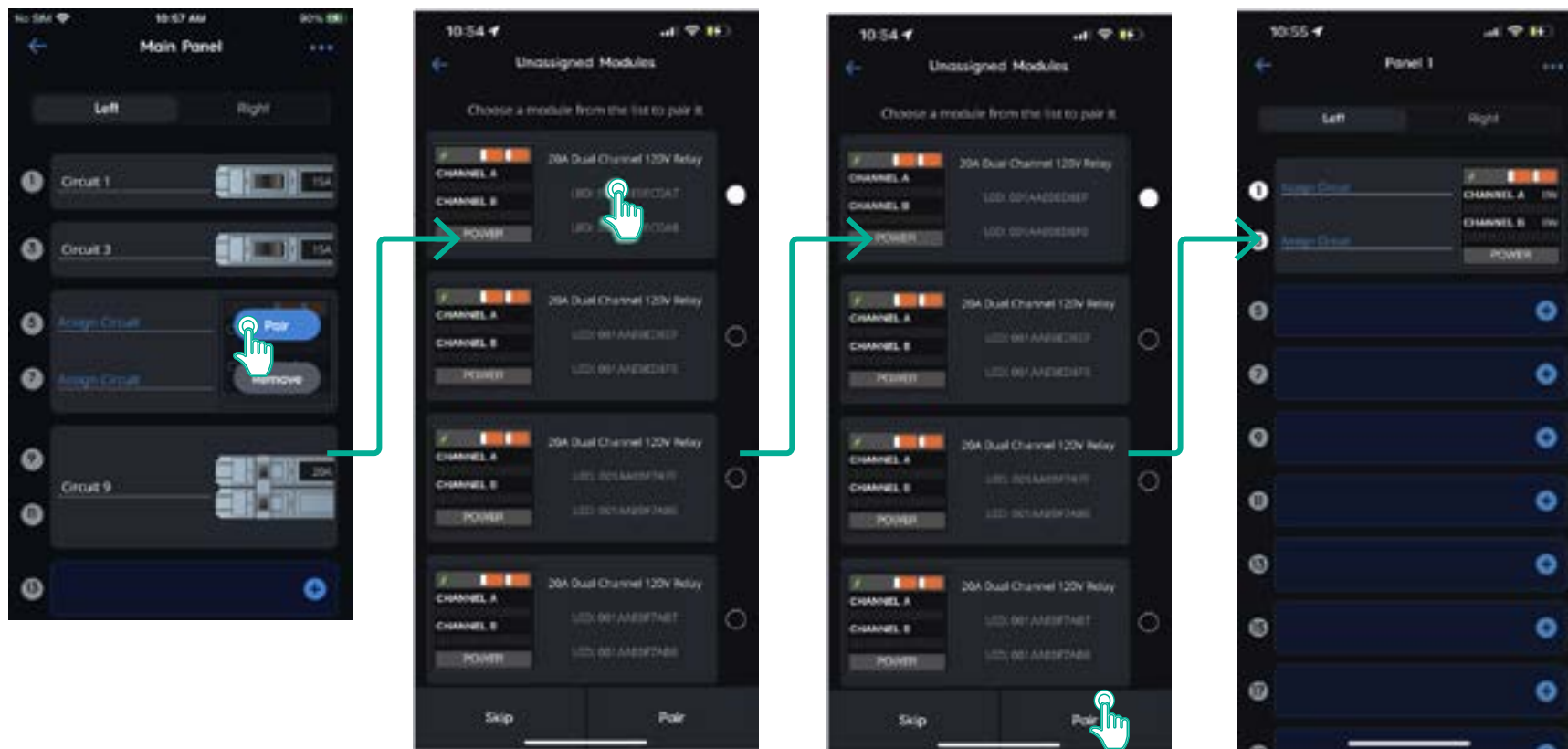
Breakers and Power Modules are added to the Breaker Panel to create a visual representation of the panel in the home. From the Breaker Panel view, add either breakers or modules. In the example below a Power Module is added.



NOTE: For more information on the Slots menu, see [Appendix E: Breaker Panel Information](#).

5.7. Pair Added Module

Pairing is when the user associates the a Power Module within the physical breaker panel to a Power Module in the Power & Light app. Repeat these steps for all Power Modules.



1 TAP PAIR

2 SELECT THE POWER
MODULE WITH
MATCHING UID

3 TAP PAIR

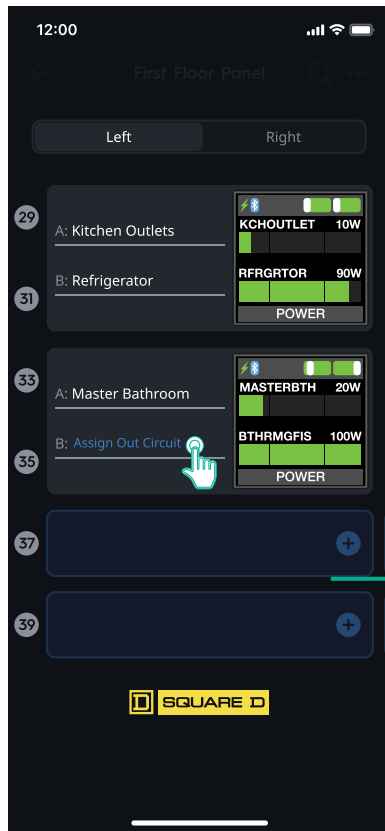
4 THE PAIR BUTTON
WILL DISAPPEAR

⚠ IMPORTANT NOTE: If a Power Module does not populate in step 6, hold the pair button down for three seconds to place the module into Association Mode. Then repeat this process.

6. Circuit Name & Group

Circuits must be named according to the circuit the Power Module is controlling. Follow the steps below to name a circuit and group it with other circuits. All circuit names and groups will be displayed in the Savant app as they are named and grouped in the Power & Light app.

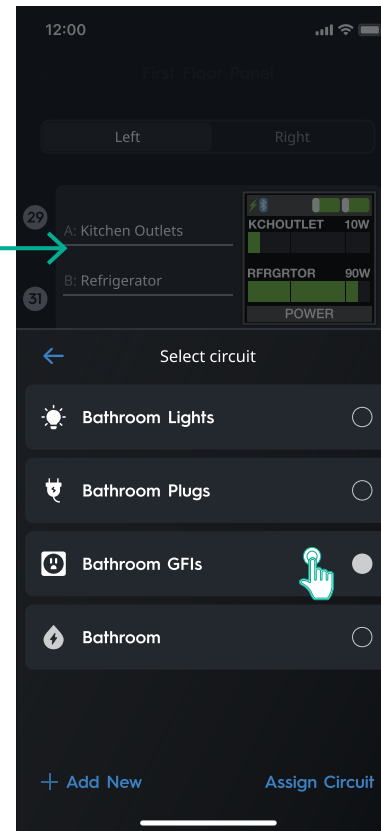
6.1. Circuit Name



1 TAP ASSIGN CIRCUIT NAME

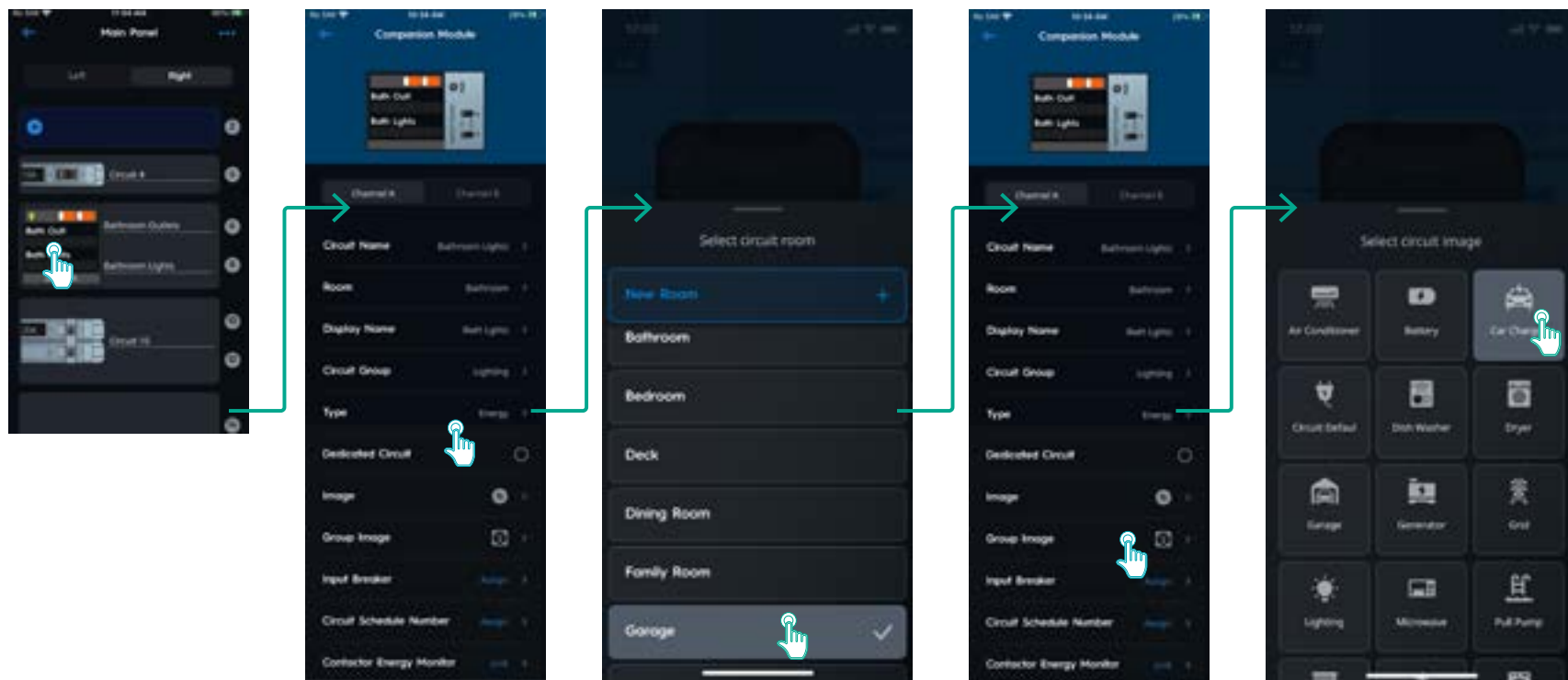


2 SELECT THE ROOM THE CIRCUIT PROVIDES ENERGY TO AND TAP SAVE ROOM



3 SELECT A CIRCUIT NAME OR ADD NEW TO CREATE A CUSTOM CIRCUIT NAME AND TAP ASSIGN CIRCUIT

6.2. Circuit Group & Image



1 IN THE BREAKER PANEL SCREEN, TAP THE POWER MODULE

2 TAP CIRCUIT GROUP

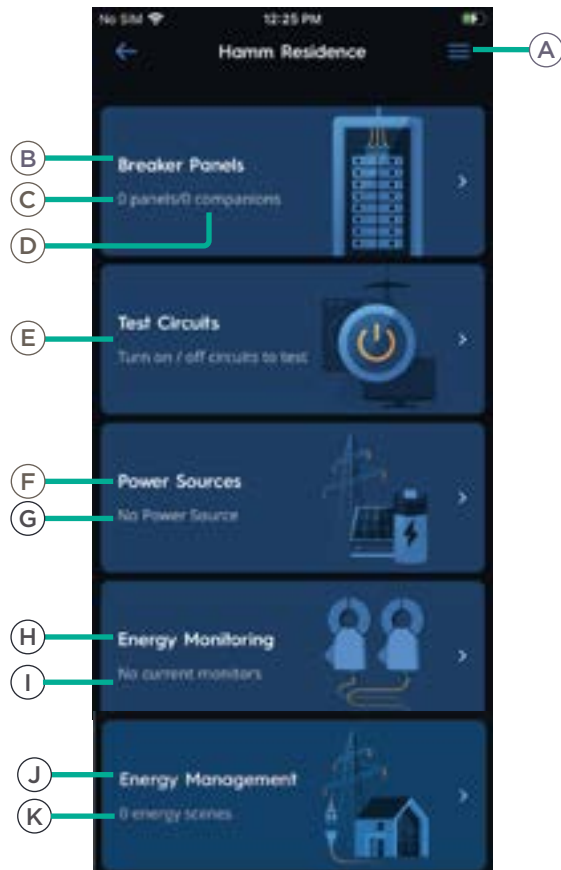
3 SELECT THE CIRCUIT GROUP

4 TAP GROUP IMAGE

5 SELECT A GROUP IMAGE

7. Dashboard

The main screen of the Savant Power & Light app is the **Dashboard**. The Dashboard appears after all devices have been discovered, or when the Savant Home is selected after initial deployment. It contains a list of all tiles available within the app and any configured settings within that tile.

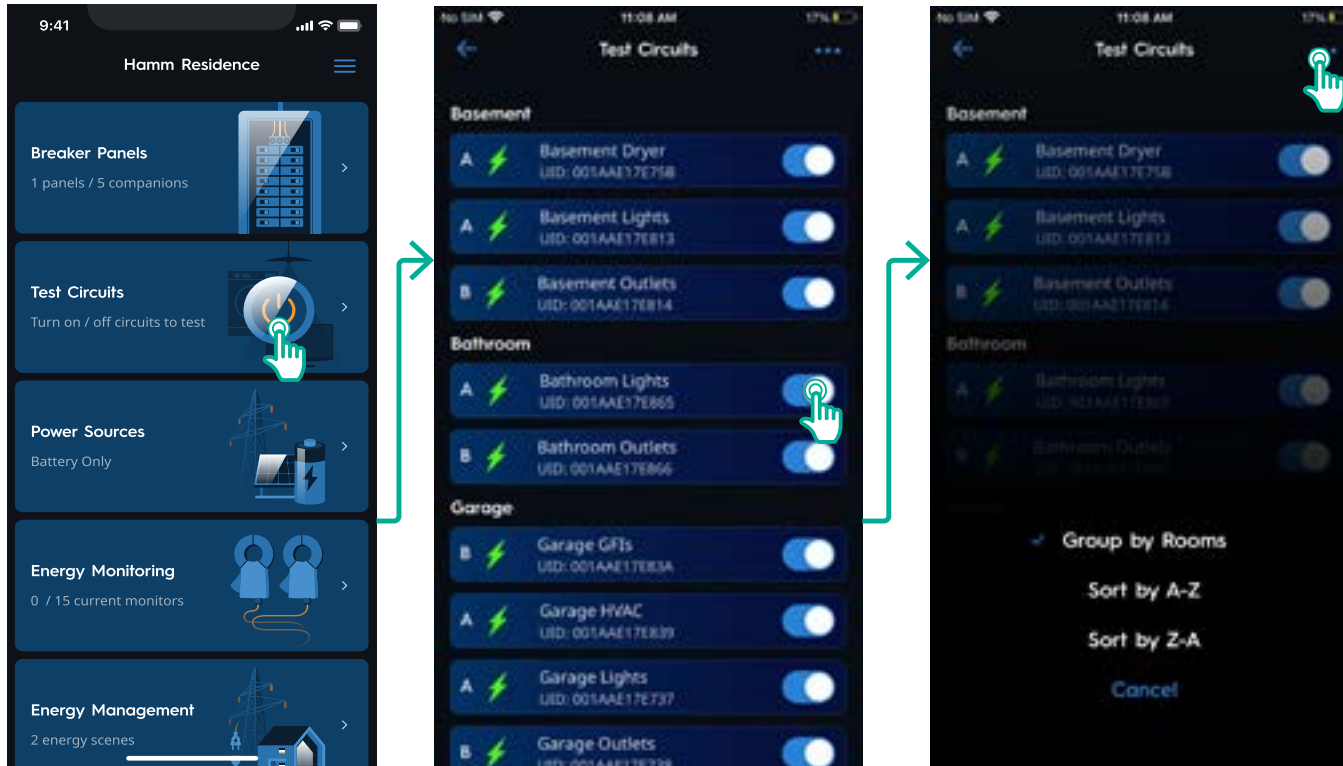


		Tap to open the Menu screen, which contains the following options:
		<ul style="list-style-type: none"> - Profile Settings - About - Provisioning Devices to Wi-Fi - Rooms and Circuits - Update Software - Configure Energy and Lighting Devices - Log Out
(A)	Menu	
(B)	Breaker Panels	Tap to view Breaker Panels.
(C)	Panels	Quantity of Breaker Panels configured.
(D)	Power Modules	Quantity of Power Modules configured.
(E)	Test Circuits	Tap to view the Test Circuits screen and manually control all Power Module circuits.
(F)	Power Sources	Tap to view and configure a Power Source .
(G)	Power Source Type	Type of Power Source configured.
(H)	Energy Monitoring	Tap to view and configure Current Monitors and Contactors.
(I)	Current Monitors	Quantity of detected Current Monitors over configured Current Monitors.
(J)	Energy Management	Tap to view Energy Scenes .
(K)	Energy Scenes	Quantity of Energy Scenes configured.

8. Test Circuits

Regardless of method used to complete the onboarding process, basic communication within the Savant Power System can now be tested. Use the **Test Circuits** menu on the Dashboard to control individual circuits within the Power & Light app.

⚠️ IMPORTANT: Before testing circuits, turn on loads in test circuits, then toggle the Circuit Power switches on all Power Modules from ON to **AUTO**.



1 ON THE HOME SCREEN, TAP TEST CIRCUITS

2 TAP THE TOGGLE SWITCH TO TURN INDIVIDUAL LOADS ON OR OFF

3 TAP THE ... ICON TO SORT CIRCUITS ALPHABETICALLY OR BY ROOM

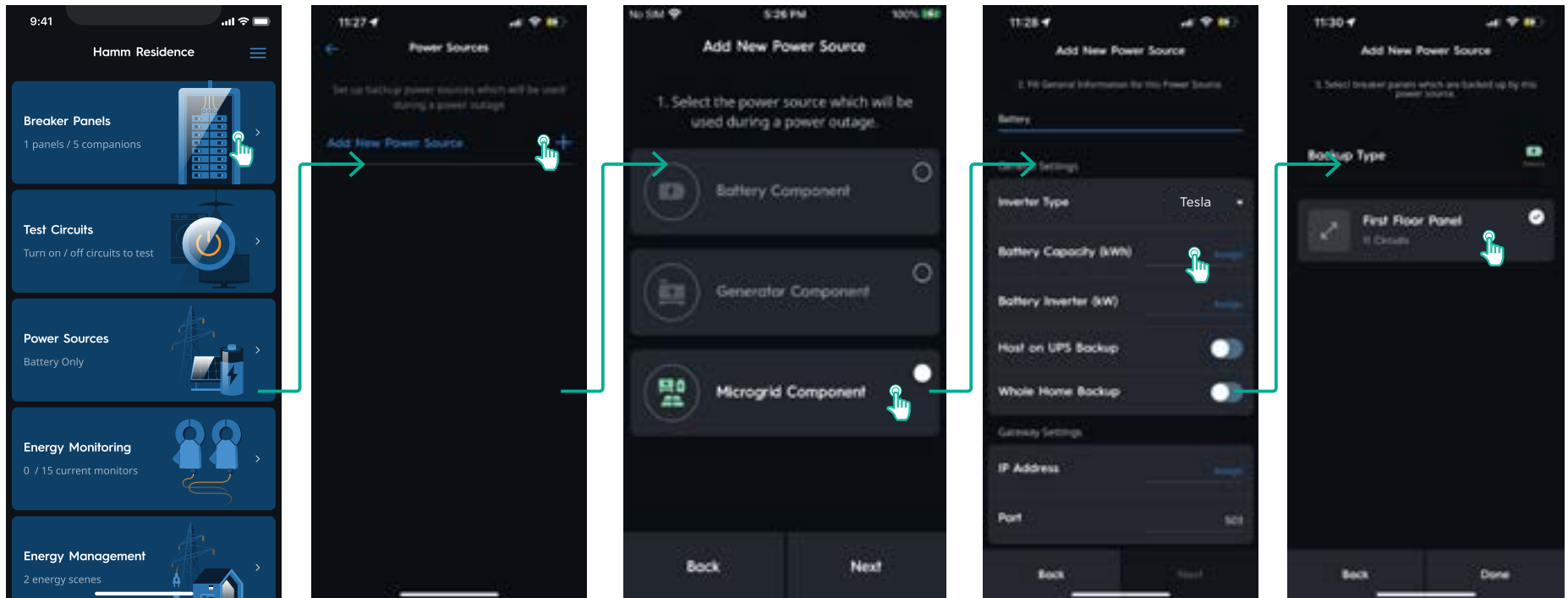
NOTE: Circuits monitored by a Smart Energy Monitor cannot be controlled from the **Test Circuits** tile.

9. Add Power Source (If Applicable)

A **Power Source**, such as a generator, battery, or inverter, may be installed in the home to provide local power. Configure a Power Source within the Power & Light app by following the steps below. For inverter-specific settings, see [Appendix C: Inverter Settings](#).

⚠ IMPORTANT NOTES:

- Only one Power Source can be configured.
- Savant Power Systems with **Tesla PowerWall** inverters require **Whole Home Backup**.



1 TAP POWER SOURCES

2 TAP THE PLUS SIGN TO CREATE A NEW POWER SOURCE

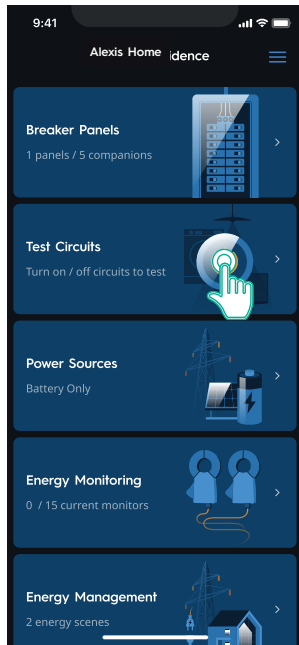
3 SELECT THE POWER SOURCE AND TAP NEXT, THEN CHOOSE THE TYPE OF COMPONENT

4 ENTER GENERAL SETTINGS AND TAP NEXT

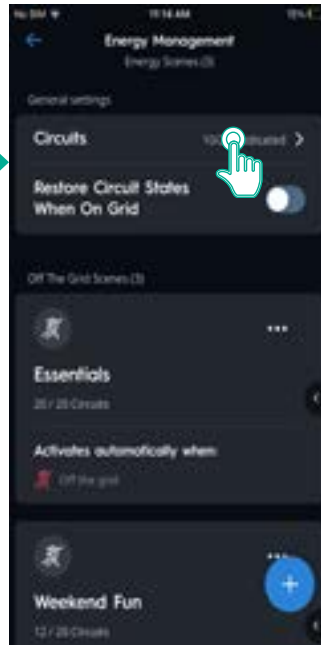
5 CHOOSE WHICH BREAKER PANEL TO BACK UP AND TAP NEXT

10. Configure Dedicated Circuits (If Applicable)

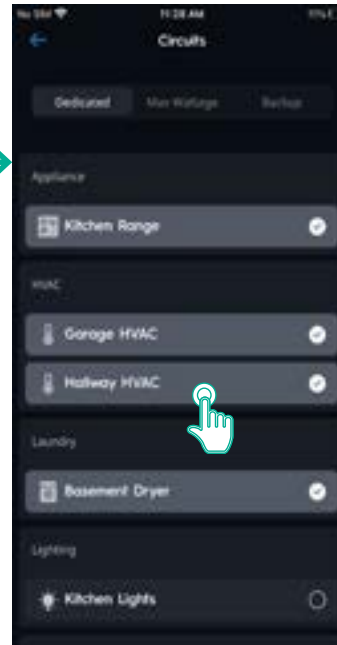
A **Dedicated Circuit** powers fixtures with a known wattage that remain plugged in and usually are not moved, such as an oven or dryer. When a circuit is configured as a Dedicated Circuit, the known max wattage must be entered and will be factored into the Energy Budget during Off Grid Scenes.



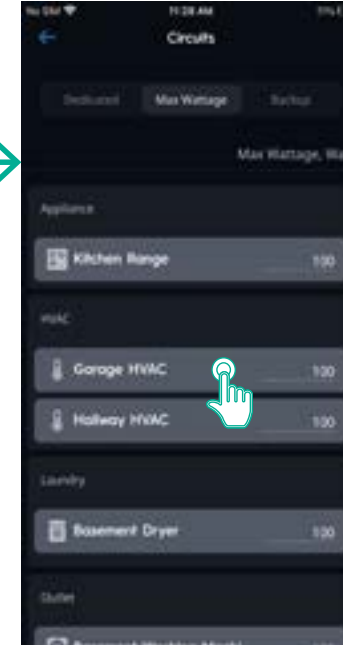
1 TAP ENERGY MANAGEMENT



2 TAP CIRCUITS



3 SELECT ALL DEDICATED LOADS



4 TAP MAX WATTAGE AND ENTER THE WATTAGE FOR EACH DEDICATED LOAD, THEN TAP BACKUP AND CHOOSE WHICH LOADS ARE BACKED UP BY A POWER SOURCE

11. Create Energy Scenes (Optional)

An **Energy Scene** dictates what circuits are available. An **Off-Grid Energy Scene** is a class of energy scenes configured to automatically activate to ensure user-defined dedicated circuits are available when a power outage occurs. They can also be activated when certain criteria is met. Energy Scenes have a priority list.

Energy Scene Priority List

1. In the event of a power outage, the Essentials scene will be activated and enable critical loads, while shedding Non-critical circuits.
2. If the battery state of charge has reached a level that exists in an Off Grid Scene condition **when the grid goes down**, that particular Off Grid Scene will activate.
3. If the battery state of charge reaches a level that exists in an Scene condition **while the grid is down**, that Off Grid Scene will activate.

To create additional Off Grid Energy Scenes, follow the steps below. Additional scenes use the battery state of charge or a schedule as optional triggers.

The diagram illustrates the four steps to create an Off-Grid Energy Scene:

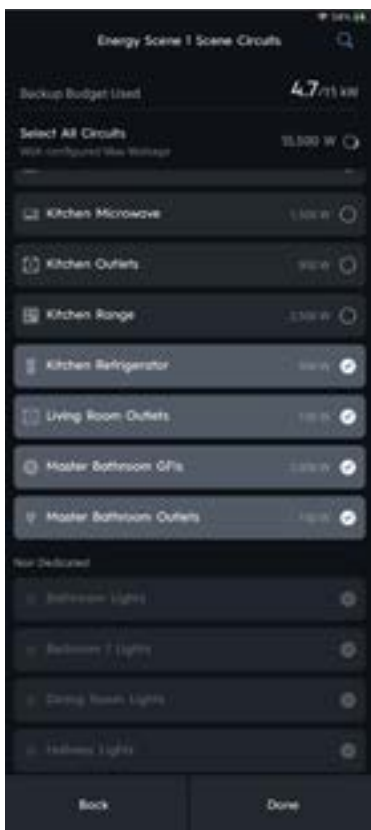
- 1 TAP ENERGY MANAGEMENT**: The user is on the 'Hamm Residence' main screen. The 'Energy Management' option at the bottom is highlighted with a hand icon.
- 2 TAP THE PLUS SIGN TO CREATE A NEW SCENE**: The user is in the 'Energy Scenes (6)' screen. The 'Essentials' scene is shown with a plus sign icon in the top right corner, which is highlighted with a hand icon.
- 3 SELECT AN OFF GRID SCENE**: The user is in the 'Select Grid Mode' screen. The 'Off The Grid' option is highlighted with a hand icon.
- 4 CONFIGURE SCENE SCHEDULE AND TURN CONDITIONS AND TAP NEXT**: The user is in the 'Energy Scene Settings' screen. The 'Turn Condition' toggle is turned on, and the 'When Battery depletes to:' slider is set to 10%. The 'Next' button at the bottom right is highlighted with a hand icon.

11.1. Edit Critical Circuits

A Critical Circuit is a circuit that the system will always provide power in the case of a power outage. It will not be shed. All Non-dedicated circuits are always critical and therefore will always be powered in a power outage. Critical Circuits are represented by a checkmark.

- A critical circuit can be dedicated. If a critical circuit is also dedicated, it is calculated into the Backup Budget.
- Non-dedicated loads will sometimes be marked as non critical if their current is able to overwhelm the system in the case of a short.

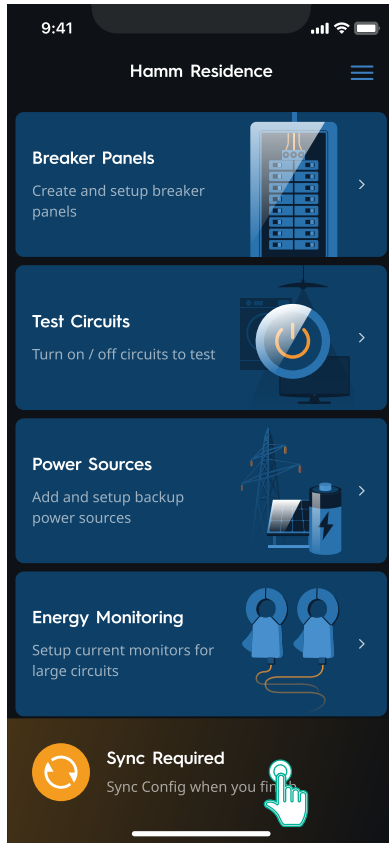
⚠ IMPORTANT NOTE: Total Critical Circuit wattage is subtracted from the total Backup Budget. **Backup Budget** is the total wattage provided by the Power Source when access to the Grid is lost, minus the system reserve. For more information on Backup Budget calculation, see the [Savant Power System Design Guide](#).



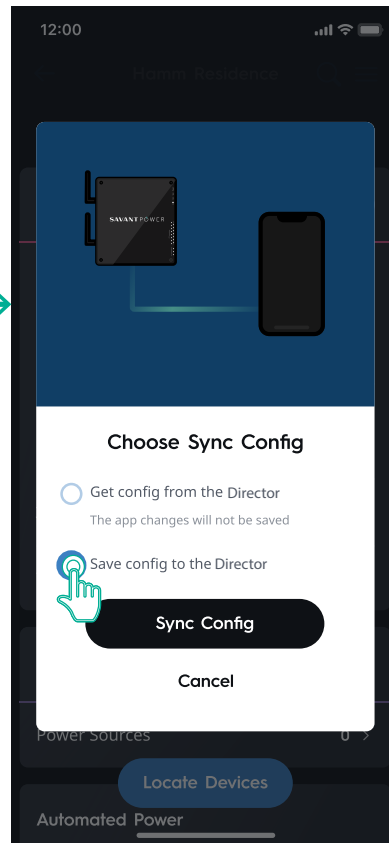
TAP A CIRCUIT TO TOGGLE CRITICAL OR NON-CRITICAL

12. Upload Config

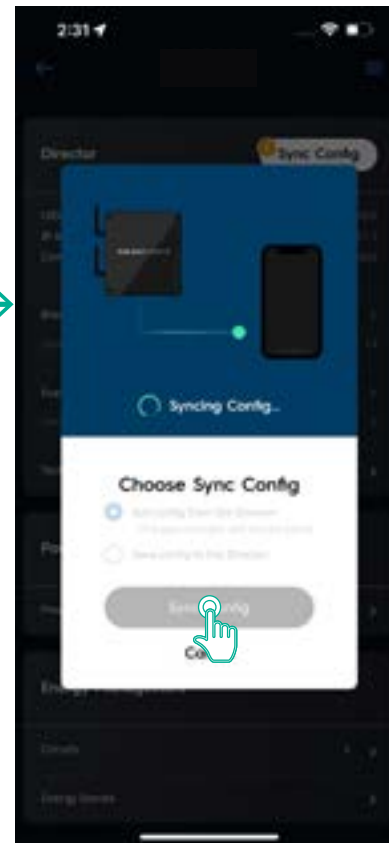
All devices and their settings are stored as a **Config** file on the Director. All changes made on the Savant Power & Light app are not saved until the Config is uploaded to the Director. To upload the Config to the Director, follow the steps below.



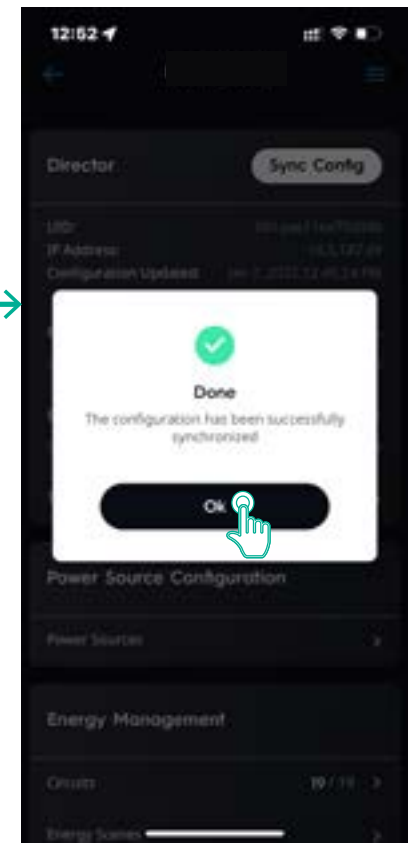
1 TAP SYNC CONFIG



2 TAP SAVE THE CONFIG TO THE DIRECTOR



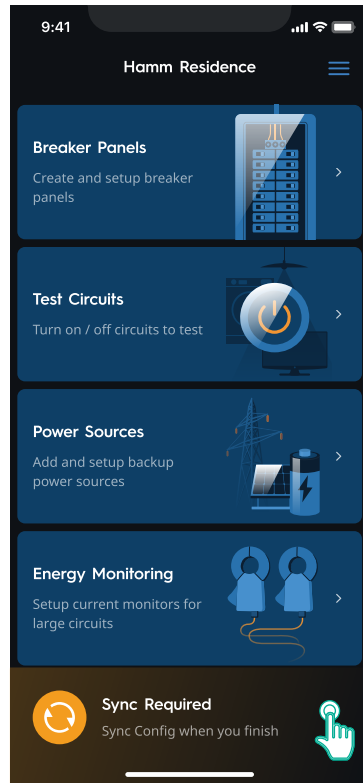
3 TAP SYNC CONFIG. THE GREEN CIRCLES INDICATE THE CONFIGURATION IS BEING UPLOADED



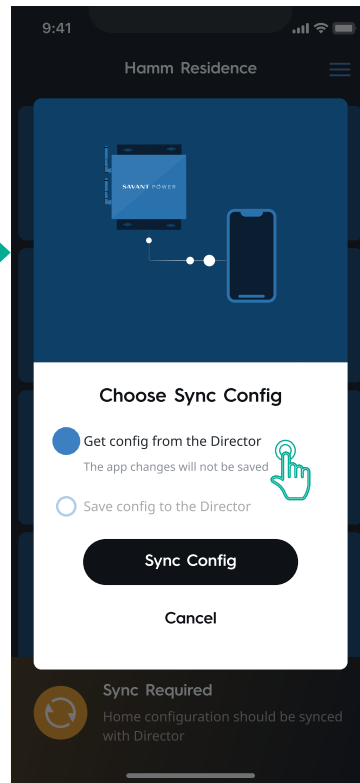
4 TAP OK WHEN THE UPLOAD IS COMPLETE

13. Get Config

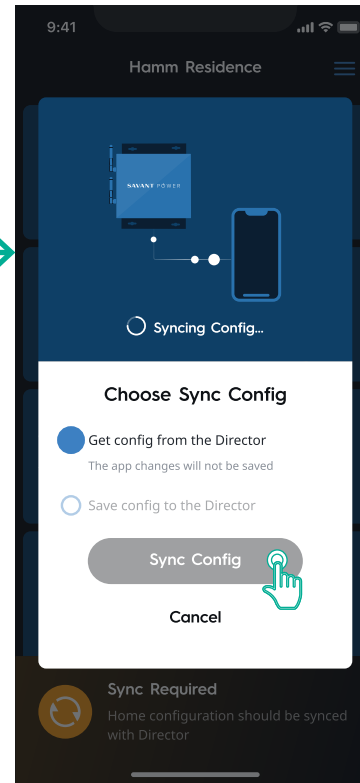
When accessing a Savant Power System that has been previously configured, the configuration must be downloaded. **Get Config** is the process of copying the configuration stored on the Director to the Power & Light app for further editing. To get the Config and begin editing, follow the steps below.



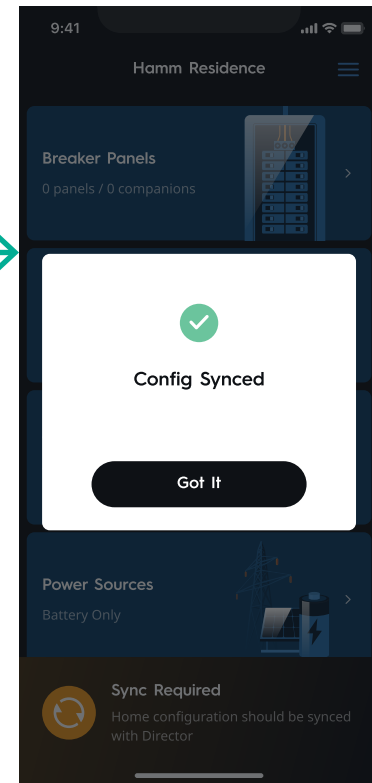
1 TAP THE SYNC ICON



2 TAP GET CONFIG FROM THE DIRECTOR



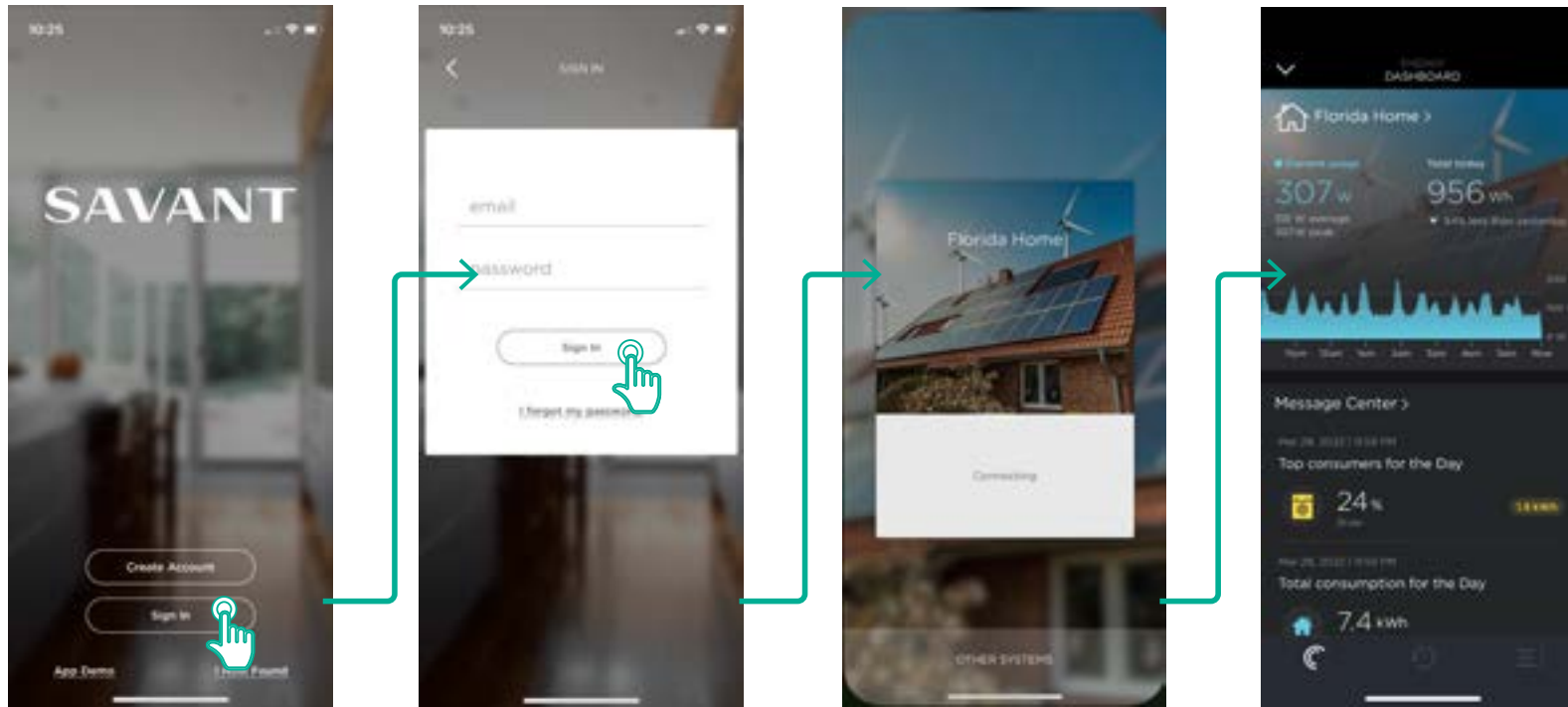
3 TAP SYNC CONFIG



4 TAP GOT IT WHEN DOWNLOAD IS COMPLETE

14. Savant App Integration

Once the Config has been uploaded, all changes are made to the Config and uploaded to the Director. The user can now access all of the information and settings provided by the completed installation using the Savant App.



1 CREATE AN ACCOUNT OR TAP SIGN IN

2 ENTER THE PRO APP EMAIL AND PASSWORD AND TAP SIGN IN

3 CONNECT TO THE SAVANT HOST

4 THE ENERGY DASHBOARD LISTS DATA FROM ALL CONFIGURED POWER SOURCES AND CIRCUITS

15. Confirm System Functionality

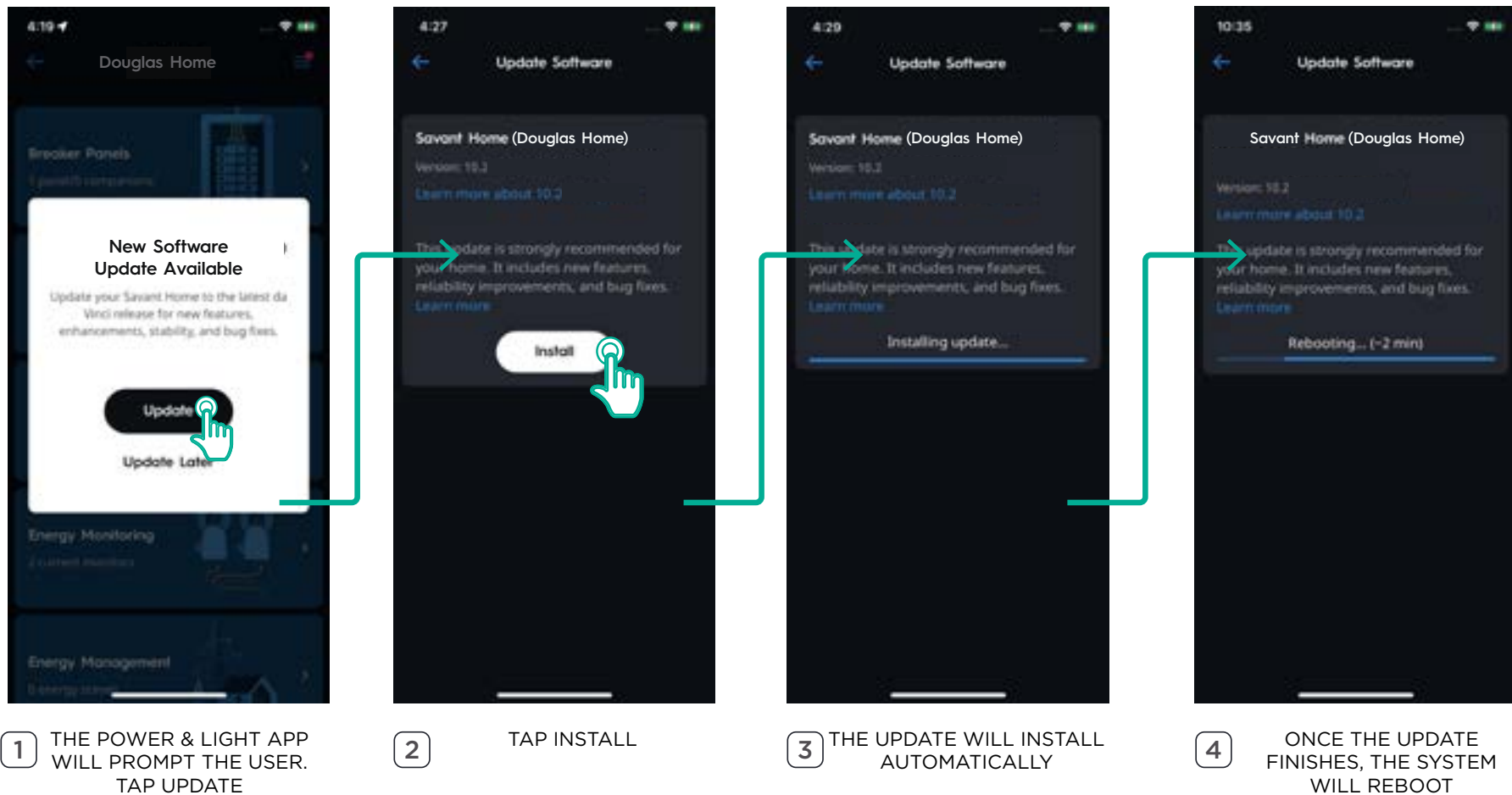
Once the configuration is synced to the Director, Savant Power & Light app configuration is complete. However, it is important to test the system to ensure correct functionality

1. Check that All Circuits are Named Correctly on Power Module Display
2. Confirm that Circuit Power Readings appear Correctly on Power Module Display
3. Ensure that All Circuits can be Powered On and Off from the Savant App.....
4. Check that All Loads Report Energy Readings Properly in the Savant App
5. Check that Total Consumption, Battery, and Grid Power are Reported Properly in the Savant App
6. Take the System Off the Grid and Check that the appropriate Off Grid Scene Triggers
7. Test all Configured Off-Grid Scenes – Check that the Load States are Set Accordingly
8. Bring the System Back onto the Grid and Check that All Loads are Restored.....

Appendix A: Software & Firmware Update

Director & Devices

The Savant Power & Light app will automatically prompt the user to update the software for the Director and any Savant devices within the Savant Power System whenever the Home is accessed if a new version is available.



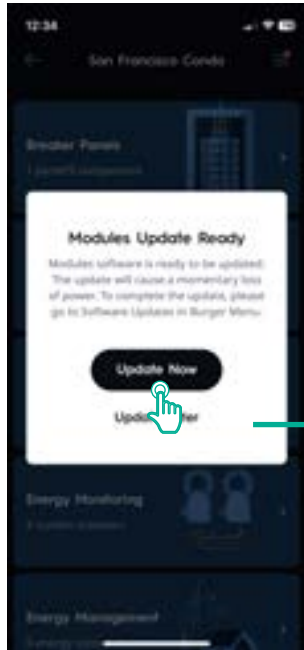
NOTE: The Director Status LED will flash red and green until the update is complete.

Power Modules

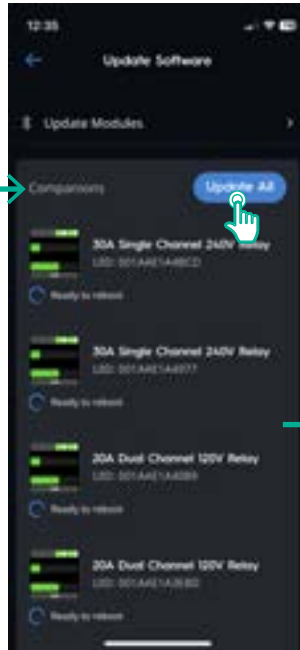
Power Modules will also automatically update whenever the Home is accessed and a firmware update is available. Compare the Power Module model number to the model numbers listed in the sections below. Then follow the steps below to update Power Module firmware:

⚠ IMPORTANT NOTE! When updating Power Module firmware, all loads connected to breakers controlled by the affected Power Modules will be powered off briefly while the update is completed.

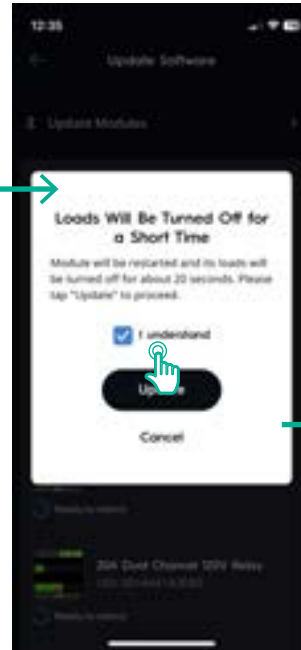
GPM-xxxx



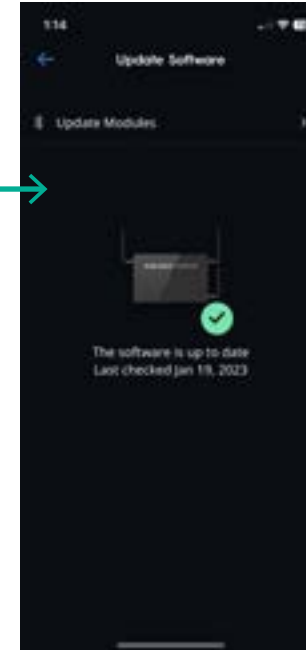
1 THE POWER & LIGHT APP WILL PROMPT WHEN UPDATE IS AVAILABLE. TAP UPDATE NOW



2 TAP UPDATE ALL



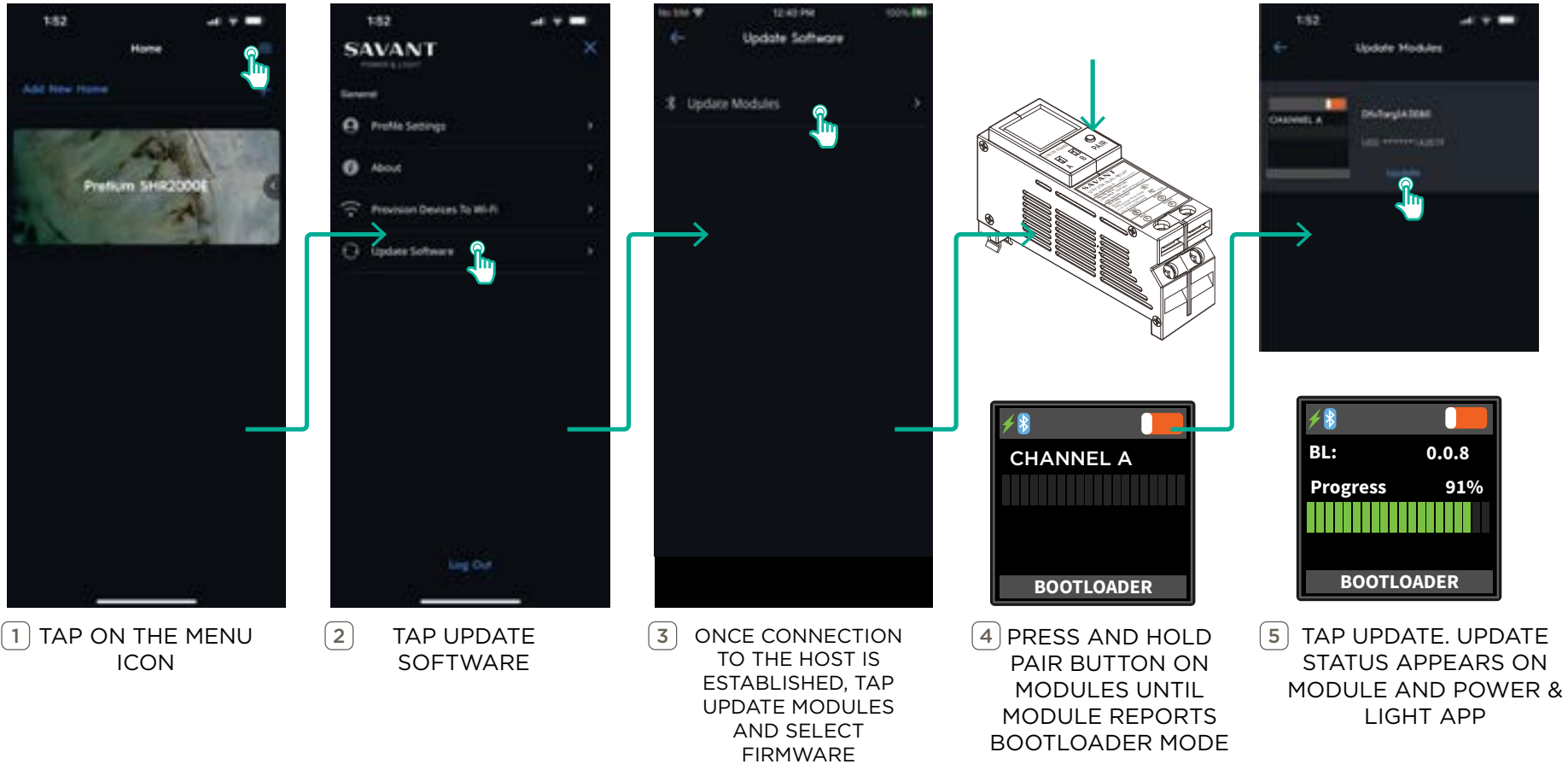
3 CHECK I UNDERSTAND AND TAP UPDATE



4 ALL MODULES WILL UPDATE AND REBOOT. WHEN COMPLETE, NO MODULES WILL DISPLAY

RPM-xxxx & SPM-xxxx








⚠ IMPORTANT: Before updating RPM Power Modules, submit a case to [Savant Support](#) titled **RPM Power Module Firmware Update <SiteName>** to acquire the correct firmware package for step 3.



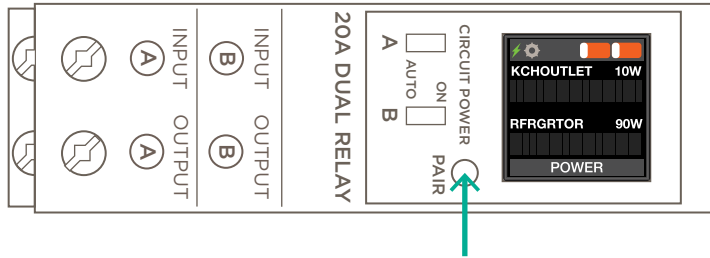
NOTE: Repeat steps 3 through 5 for each Power Module.

Appendix B: Power Module Information

Status Icons

Icon	Description
	Indicates the Power module is communicating with the Director.
	Indicates the module installed is a dimmer type module.
	Indicates the module installed is a relay type module.
	Indicates the manual circuit power switches on the Power Module are in the AUTO position. As power is applied to the loads, the color becomes green and the gray bar in this icon tracks the intensity of the load. Output A = leftmost switch on LCD (position of module in panel doesn't matter). Output B = rightmost switch on LCD (position of module in panel doesn't matter)
	Indicates the manual circuit power switches on the Power module are in the ON position.
	Indicates the module is in Association Mode and is waiting to communicate with the director.
	Indicates the module is being located via the Identify Device feature.

PAIR Button Functions

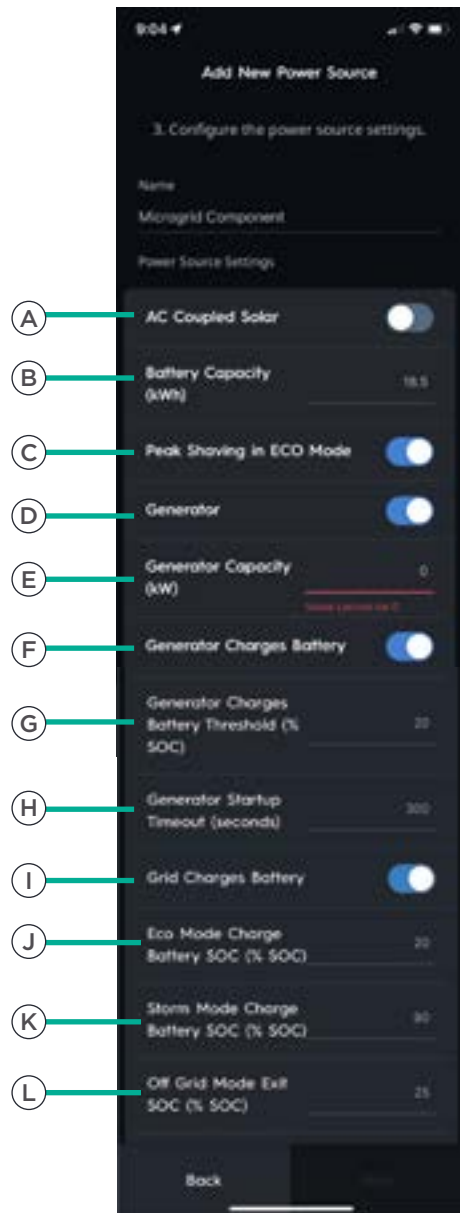


Length of Press	Action	Description
Tap	Cycle	Cycle through actions available in the menu displayed on the Power Module LED screen.
1 Second	Select	Selects the option highlighted within the menu.
3 Seconds	Clear Pairing	Removes the Bluetooth association between Power Module and a paired Director.
5 Seconds	Reboot	Reboots the Power Module.

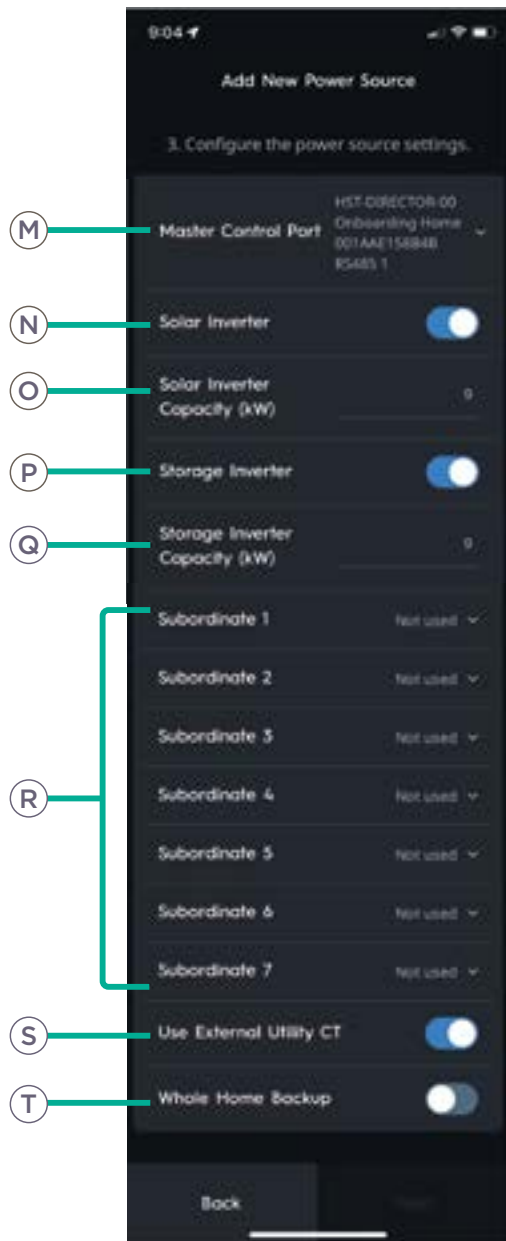
Appendix C: Inverter Settings

This Appendix covers all inverter settings and their definitions. All settings listed within this section must conform to the parameter settings according to site design listed in the inverter specific Savant Power System Deployment Guide.

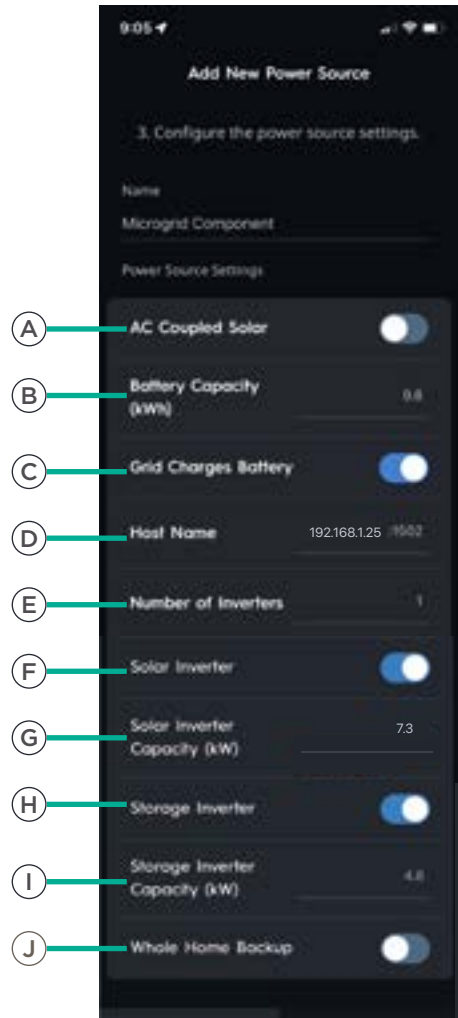
Sol-Ark



Setting	Description
A AC Coupled Solar	Enable when AC Coupled solar panels are present.
B Battery Capacity (kWh)	The capacity of the battery in kWh.
C Peak Shaving in ECO Mode	Enable to allow Peak Shaving in ECO mode.
D Generator	Whether or not a generator is present within the Savant Power System.
E Generator Capacity (kW)	Total rated capacity of the generator in kW.
F Generator Charges Battery	Enabled: The generator is directly connected to the inverter and used to charge the battery. Disabled: Generator is on an external ATS and used to directly power home.
G Generator Charges Battery Threshold (% SOC)	The battery SOC level (0%-100%) that the generator will turn on at and charge the battery.
H Generator Startup Timeout (seconds)	The length of time in seconds before the Savant Power System will consider the generator timed out if it has not started.
I Grid Charges Battery	Whether the Grid charges the installed battery or not.
J Eco Mode Charge Battery SOC (% SOC)	ECO Mode Only: When the SOC is below this SOC, the Sol-Ark inverter will use the grid to charge the battery.
K Storm Mode Charge Battery SOC (% SOC)	Storm Mode Only: When the battery SOC is below this SOC, the Sol-Ark inverter will use the grid to charge the battery.
L Off Grid Mode Exit SOC (% SOC)	Off Grid Mode Only: When the battery reaches below this SOC, the system will return to "Storm Mode".



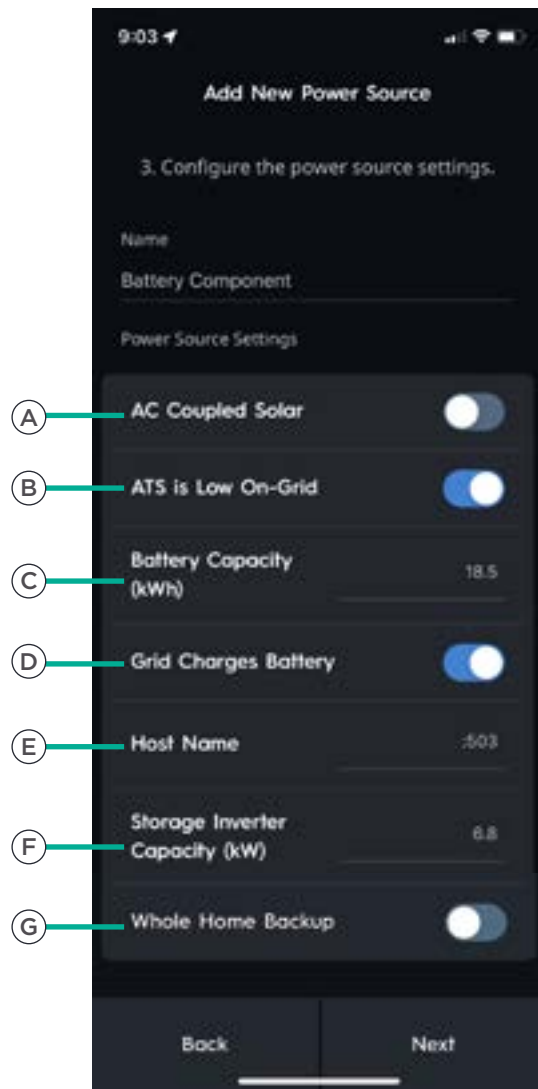
	Setting	Description
(M)	Master Control Port	Which RS232 port the Primary Sol-Ark Communications Cable is connected to.
(N)	Solar Inverter	Whether solar panels are present within the Savant Power System.
(O)	Solar Inverter Capacity (kW)	Total capacity of the solar panels connected to the inverter in kW.
(P)	Storage Inverter	Enabled: Storage or Solar inverter is available to the Power Source. Disabled: Storage or Solar inverter is not available to the Power Source..
(Q)	Storage Inverter Capacity (kW)	Rated capacity of the inverter.
(R)	Subordinates	The quantity of subordinate Sol-Ark inverters and their settings.
(S)	User External Utility CT	Enable to use external Current Transformers to monitor current.
(T)	Whole Home Backup	Enable to indicate the home supports Whole Home backup. For more information on Whole Home Backup, see the Savant Power System Design Guide.



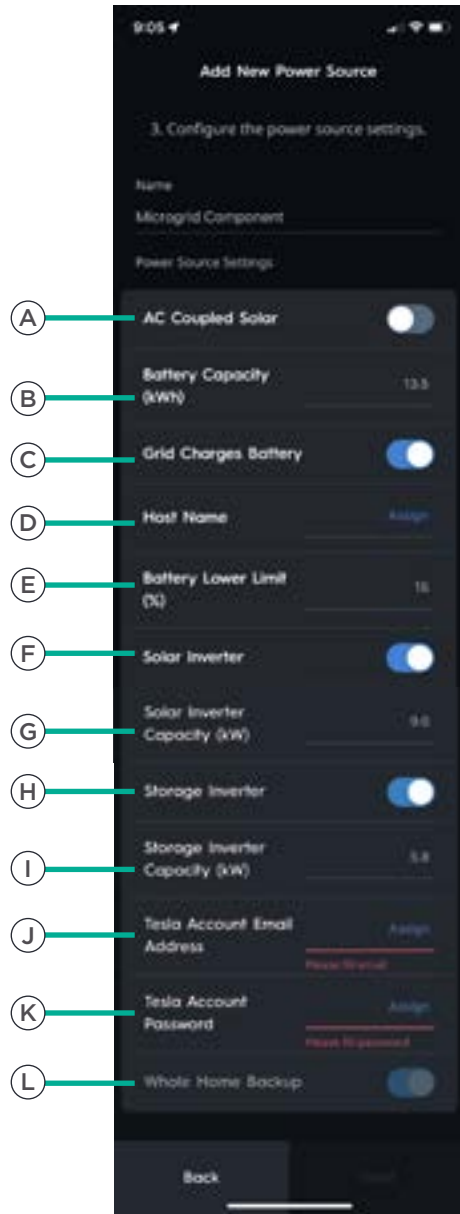
Setting	Description
A AC Coupled Solar	Enable when AC Coupled solar panels are present.
B Battery Capacity (kWh)	The capacity of the battery in kWh.
C Grid Charges Battery	Enabled: Grid will charge the installed battery. Disabled: Grid will not charge the installed battery.
D Host Name	IP Address and port of the inverter.
E Number of Inverters	Quantity of installed inverters.
F Solar Inverter	Whether solar panels are present within the Savant Power System.
G Solar Inverter Capacity (kW)	Total capacity of the solar panels connected to the inverter in kW.
H Storage Inverter	Enabled: Storage or Solar inverter is available to the Power Source. Disabled: Storage or Solar inverter is not available to the Power Source..
I Storage Inverter Capacity (kW)	Rated capacity of the inverter.
J Whole Home Backup	Whether the Savant Power System can support the total live load of the Savant Power System. For more information, see the Savant Power System Design Guide .



	Setting	Description
(A)	AC Coupled Solar	Enable when AC Coupled solar panels are present.
(B)	Battery Capacity	The capacity of the battery in kWh.
(C)	Grid Charges Battery	Enabled: Grid will charge the installed battery. Disabled: Grid will not charge the installed battery.
(D)	Host Name	IP Address and port of the inverter.
(E)	Solar Inverter	Whether solar panels are present within the Savant Power System.
(F)	Solar Inverter Capacity (kW)	Total capacity of the solar panels connected to the inverter in kW.
(G)	Storage Inverter	Enabled: Storage or Solar inverter is available to the Power Source. Disabled: Storage or Solar inverter is not available to the Power Source..
(H)	Storage Inverter Capacity (kW)	Rated capacity of the inverter.
(I)	Whole Home Backup	Whether the Savant Power System can support the total live load of the Savant Power System. For more information, see the Savant Power System Design Guide .



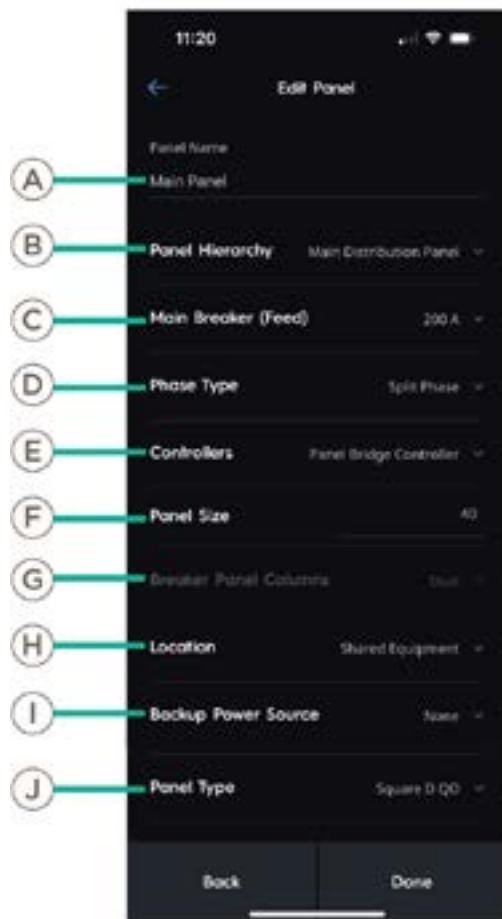
Setting	Description
A AC Coupled Solar	Enable when AC Coupled solar panels are present.
B ATS is Low On-Grid	Enabled: If the GPIO between the ATS and the Director is Low , the Savant power System has connection to the Grid. Disabled: If the GPIO between the ATS and the Director is High , the Savant power System has connection to the Grid.
C Battery Capacity	The capacity of the battery in kWh.
D Grid Charges Battery	Enabled: Grid will charge the installed battery. Disabled: Grid will not charge the installed battery.
E Host Name	IP Address and port of the inverter.
F Storage Inverter Capacity (kW)	Rated capacity of the inverter.
G Whole Home Backup	Whether the Savant Power System can support the total live load of the Savant Power System. For more information, see the Savant Power System Design Guide .



	Setting	Description
(A)	AC Coupled Solar	Enable when AC Coupled solar panels are present.
(B)	Battery Capacity	The capacity of the battery in kWh.
(C)	Grid Charges Battery	Enabled: Grid will charge the installed battery. Disabled: Grid will not charge the installed battery.
(D)	Host Name	IP Address and port of the inverter.
(E)	Battery Lower Limit	Affects battery scaling of the Savant Power system. Example: When set to 20%, the Savant Power System will reflect the battery is at 0% within the Savant App at 20%.
(F)	Solar Inverter	Whether solar panels are present within the Savant Power System.
(G)	Solar Inverter Capacity (kW)	Total capacity of the solar panels connected to the inverter in kW.
(H)	Storage Inverter	Enabled: Storage or Solar inverter is available to the Power Source. Disabled: Storage or Solar inverter is not available to the Power Source..
(I)	Storage Inverter Capacity (kW)	Rated capacity of the inverter.
(J)	Tesla Account Email	Enter Tesla account email here.
(K)	Tesla Account Password	Enter Tesla account password here.
(L)	Whole Home Backup	Whether the Savant Power System can support the total live load of the Savant Power System. For more information, see the Savant Power System Design Guide .

Appendix D: Breaker Panel Settings

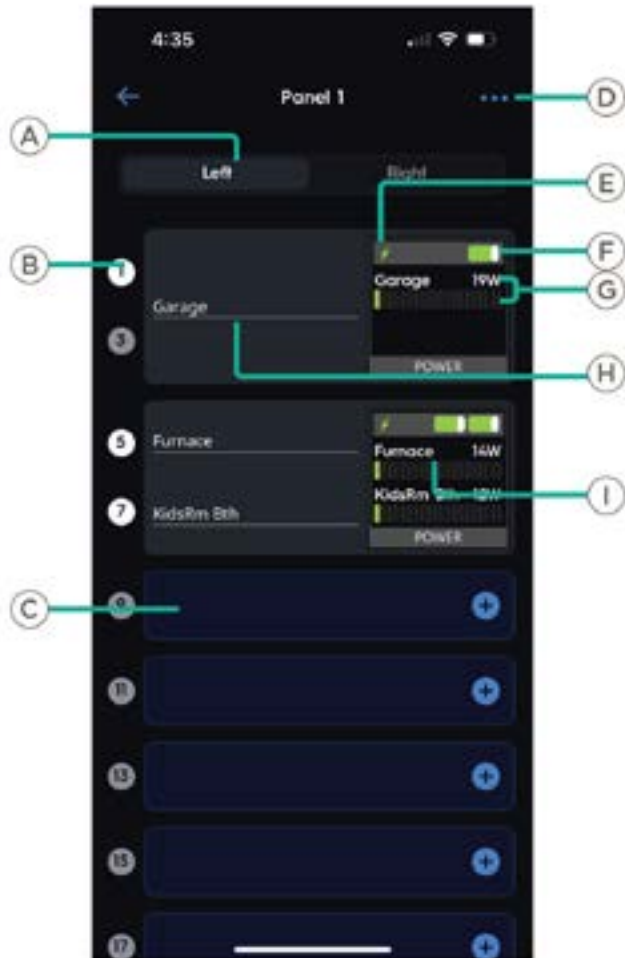
Refer to the manufacturers documentation to confirm the following settings are correct before uploading the configuration to the Director.



(A)	Panel Name	Name of the breaker panel as it will appear in the Power & Lighting app.
(B)	Panel Hierarchy	Main Distribution Panel: Panel will control distribution of power throughout the Savant Home. Sub Panel: Panel is subordinate to a Main Distribution Panel.
(C)	Main Breaker (Feed)	Current output from the main feed into this panel.
(D)	Phase Type	Quantity of phases in this panel.
(E)	Controllers	Which controller is controlling the panel.
(F)	Panel Size	Quantity of slots in the breaker panel.
(G)	Panel Breaker Columns	Quantity of columns in the breaker panel.
(H)	Location	Room within the Savant App the breaker panel is located.
(I)	Backup Power Source	Which Power Source is backing up the panel.
(J)	Panel Type	Make and Model of the breaker panel.

Appendix E: Breaker Panel Information

The Slots screen provides information regarding the status of paired and Power Modules and breakers.



Panel		
(A)	Panel Side	Which side of the panel is being displayed.
(B)	Slot Number	Individual slot in the panel. Tap to test the associated load.
(C)	Empty Slot	Tap to add a module to the slot.
Module		
(D)	Menu	Tap to change zoom level or save panel template.
(E)	Load Type Indicator	Indicates whether the Power Module controls a Lighting or Energy type load.
(F)	Switch Status	Indicates whether or not the circuit is enabled.
(G)	Power Meter	Current load out of maximum load per channel, in watts.
(H)	Circuit Name	Name of associated circuit as it will appear in the Savant App. Tap to assign or re-assign Circuit Name.
(I)	Display Name	Shorthand name for the circuit.

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