SAVANT

Wireless Lighting Deployment Guide

Metropolitan and Echo Keypads

Deployment Guide

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45 Perseverance Way, Hyannis, MA 02601
Savant.com | 508.683.2500

Contents

To access the link to the topics in this document, click the topic page.

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Important Safety Information - Read First

Before installing, configuring, or operating any equipment and other, Savant recommends that each dealer, integrator, installer, etc. access and read all the relevant technical documentation. Savant technical documentation is located by visiting Savant.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.

Safety Statements

All safety instructions below should be read, understood, and applied under all relevant circumstances when working with this equipment.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of any polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If any provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect any power cord from being walked on or pinched; particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer, following all relevant safety precautions for any such attachments/accessories.
12. Disconnect any outlet powered apparatus from its power source during lightning storms or when unused for long periods of time.
13. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when the power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
14. To completely disconnect this equipment from the AC mains, disconnect the power supply cord plug from the AC receptacle.
15. For applicable equipment, use the included power cord with the grounding prong intact to ensure proper grounding of the device.
16. 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.

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1. Introduction (IMPORTANT PLEASE READ BEFORE PROCEEDING)

This document guides an integrator through the process of adding either Metropolitan and/or ECHO style lighting devices to a Blueprint Configuration and uploading that configuration to the Host.

Depending on the installation, both the order and method of integration differs. This document will describe how to add a system of lighting devices using the following order:

1. The integrator creates a Blueprint configuration at an off-site location. This integrator has no access to the lighting devices. He/she is simply creating the configuration off site.
2. Separately, an installer/electrician mounts the lighting devices and provisions each device to the local network.
3. Either the installer, integrator, or both then take the configuration to the job site. At the job site, the Lighting/Keypad Manager in Blueprint is then used to discover and bind the devices to the Blueprint configuration file.
4. With the devices configured and the binding process complete, the file is uploaded to the Host and then tested.

However, throughout the document, alternative methods for each section are offered. It is up to the installer and integrator to determine the best method for their specific installation.

Before You Begin

Before starting the keypad integration, go through the checklist below and ensure each item is satisfied:

1. The Savant Control System is running da Vinci release version 9.0 or higher ☐
   - Supported Pro Hosts (SVR-7000S, SVR-5000S or SVR-5100S with OS X Mojave 10.14.3 or newer installed)
   - Supported Smart Hosts (SHC-2000, SHC-S2)
2. Metropolitan and/or Echo Style lighting devices are wired, calibrated, and provisioned to the local Wi-Fi network ☐
3. Savant Development Environment (SDE/MacBook®) ☐
   RacePoint Blueprint da Vinci 9.0 or higher
4. Ethernet network meeting Savant requirements ☐
   See Appendix E: Network Requirements

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2. Deployment Steps

The steps below is the order that needs to be followed to successfully deploy a Savant Metropolitan or Echo style lighting device. Use this checklist to record each step as it is completed.

1. Enable Lighting and Fan Resource on the Host - See Blueprint - Preliminary Setup ☐
2. Add lighting devices to the lighting manager in Blueprint - See Adding Keypads to a Blueprint Configuration ☐
3. Set the binding on the lighting device - See Bind Keypads ☐
4. Update the Lighting Data Table - See Create/Update the Lighting Data Table ☐
5. Upload Configuration to Host - See Upload the Blueprint Configuration ☐

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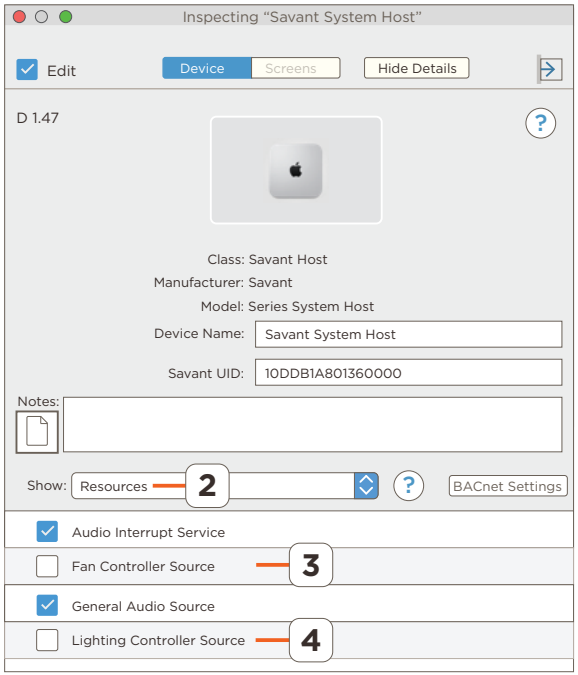
3. Blueprint - Preliminary Setup

By default, the lighting and fan controller resources in the Host are disabled. With these resources disabled, the Lighting and Keypad Manager can't be accessed. Follow the steps below to enable these resources.

IMPORTANT! Starting with release da Vinci 9.1, the Fan and Lighting Controller Resources in Blueprint are by default set to enabled (checked). When working in da Vinci 9.1 or higher, skip section 3.1 and begin with section 3.2.



3.1. Enable Lighting and Fan Resource

1. In Blueprint, double-click the Host to open the Host inspector (The inspector is shown in image to the right).
2. Select **Resources** from the Show: drop-down menu.
3. Add a check to the **Fan Controller Source** field check box. By default, this box is unchecked.
4. Add a check to the **Lighting Controller Source** field check box. By default, this box is unchecked.
5. Close the Inspector.

3.2. Enable the Keypad Manager

When the configuration being built consists of just lighting, or if the Lighting/ Keypad Manager of an existing configuration is grayed out (not active), perform the steps below to activate the manager. If the Lighting and Keypad Manager is active, skip this section.

1. Drag the Host into the Blueprint layout window (if not already in the layout window).
2. From the Blueprint toolbar, select **Show Library** to open the Component Library.
3. Locate and add a **Generic NetworkSwitch**.
4. Connect the **Ethernet** port from the Host to one of the Ethernet ports on the network switch.
5. Select the **Generate Services** icon from the Blueprint toolbar. The state icon will change from orange to either blue or green. At this point, the Lighting/Keypad Manager will become active.

HELPFUL! The STATE icon available on the Blueprint toolbar indicates if the Lighting and Keypad Manager is active. See information below.

	Keypad Manager is active. Skip this section.
	Lighting/Keypad Manager is not active (grayed out). Currently, either there are no lighting services generated in Blueprint or a change to a service in Blueprint was made. Select the Generate Services icon on the Blueprint toolbar. This will change the State Icon to either Blue or Green and make the Lighting/Keypad Manager active.

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4. Adding Keypads to a Blueprint Configuration

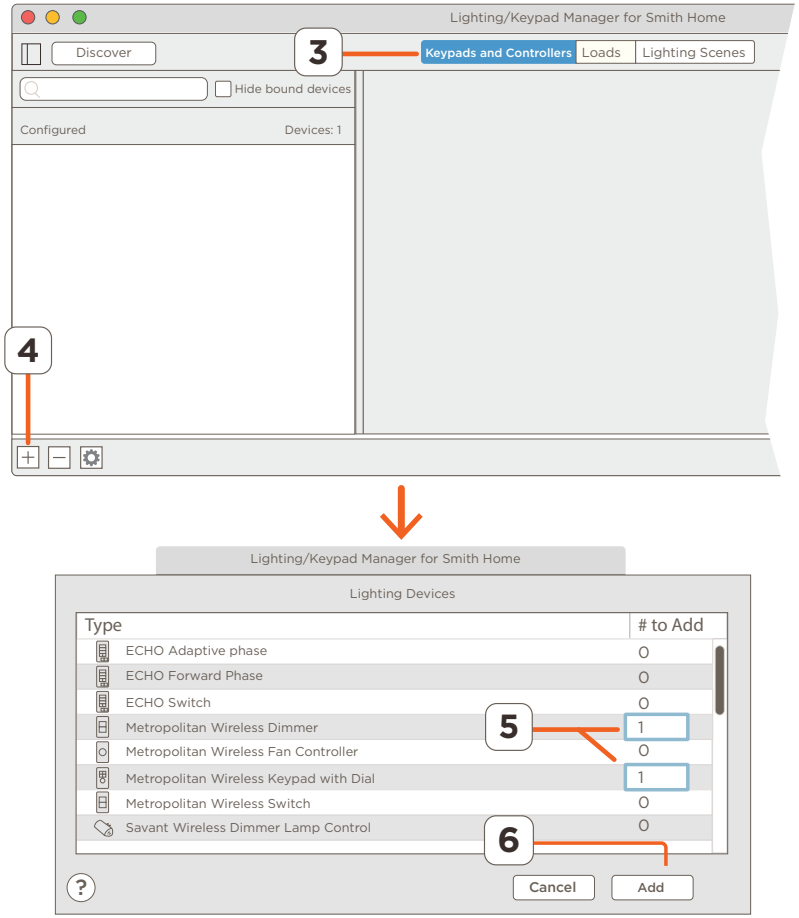
The first step is to add each lighting device to a Blueprint configuration. When building the configuration off-site and there is no access to the hardware, the only way of adding devices to a configuration is to add them manually (Manual Method). Section 4.1 below describes how to manually add them.

4.1. Add a Keypad to the Configuration Manually

1. Open a Blueprint configuration. If the Lighting/Keypad Manager is not active, see the Blueprint - Preliminary Setup section above.
2. Open the Lighting/Keypad Manager (**Tools > Savant Lighting and Keypads**).

TIP! The Manage Lighting icon [Manage Lighting] on the Blueprint toolbar, also opens the manager.

3. Select the **Keypads and Controllers** tab.
4. Select the Add [+] box.
5. In the Lighting Devices drop-down menu, highlight the **# to Add** field and enter the number of each device to add.
6. Select **Add** to add the device(s) to the window labeled **Configured**.



LEARN MORE

- To delete a device from the Lighting/Keypad Manager, highlight the device, select the remove icon [—], and follow the prompts.
- To remove or unbind ALL devices at once, select the gear icon and follow the prompts.
- When the **Hide bound devices** box is checked, all the lighting devices that are bound are hidden from the list of Configured lighting devices. This function is useful for keeping track of which devices are bound and which are not.

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4.2. Configure Basic Keypad and Button Attributes

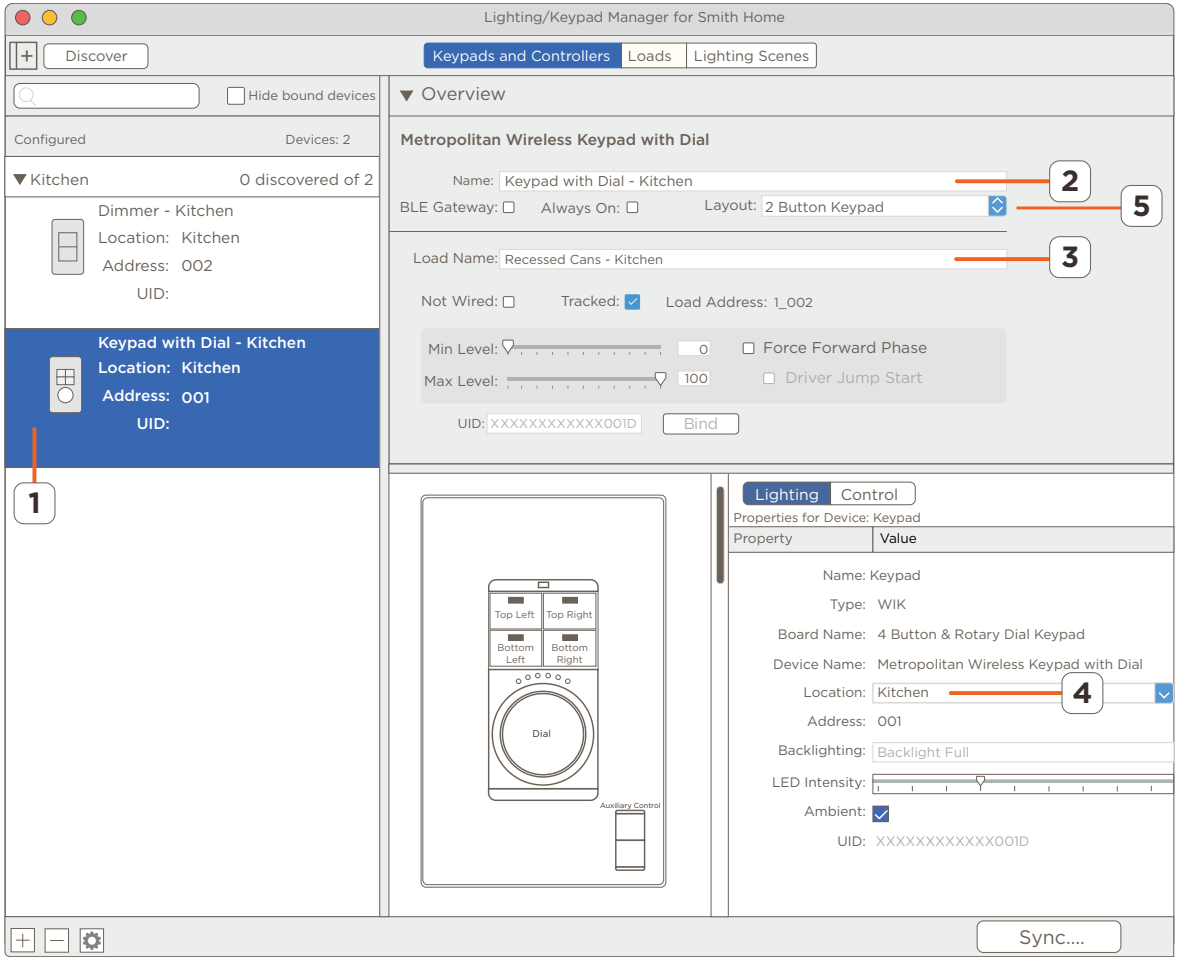
With lighting devices added to the configuration, some basic information about each device and its connected load (hardwired load) need to be configured. Follow instructions below to configure a few basic settings.

IMPORTANT NOTE: The instructions below are a minimum setup to get a lighting device operating in a Savant System. Because of this, not all fields are filled in. For information on the more advanced fields and what they do, see the **Savant Lighting Programming Guide (009-1810)** on the Savant Customer Community.

1. Select one of the keypads listed in the Configured window (These devices were added in the previous section).
2. Enter a **Name** that identifies the device. The name should identify the device and make it easy for an integrator or installer to recognize it when entering the room.
3. Enter a **Load Name** that identifies the load that is hardwired to the device. The name added should identify the load and make it easy for integrator or installer to recognize it when entering the room.

HELPFUL! The label entered in the Load Name field is how the load will be presented in the Pro and TrueControl II App.

4. Select the Lighting tab to the device and set a **Location** with the drop-down menu. The location determines which room in the TrueControl II or Pro App the device will be available in.
5. When adding an Echo style keypad, the button layout must be set. This is set from the drop-down menu of the **Layout** field. All other devices such as the Metropolitan style keypad, this field is automatically set and can't be changed.
6. Repeat steps 1-5 above for all devices listed in the Configured window.



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5. Bind Keypads

Binding or unbinding is the process of adding or removing the UID of a lighting device to or from a Blueprint configuration file. Binding is an important process and is required for the lighting device to operate in the system. There are two ways to set the bindings they areas follows:

1. Set the bindings from within the Lighting/Keypad Manager in Blueprint using Discovery. This method adds the UID directly to the configuration file before uploading the file to the Host. Setting the bindings using the Discovery is described in sections 5.1 and 5.2.
2. Set the bindings using an embedded Web UI that is accessed through either the SmartConnect or System Monitor applications. This method adds the UID to the configuration file after the configuration is already uploaded and running on the Host. In this process, to get a configuration file with the UID set in the configuration file, the user must export the file from the Host.

When using the Lighting/Keypad Manager in Blueprint to set the bindings, simply follow sections 5, 6, and 7 below. When using the embedded Web UI to set the bindings skip section 5 and complete sections 6, 7, and Appendix A. The Appendix A section describes the binding process using the Web UI and is done once the file is uploaded and running on the Host.

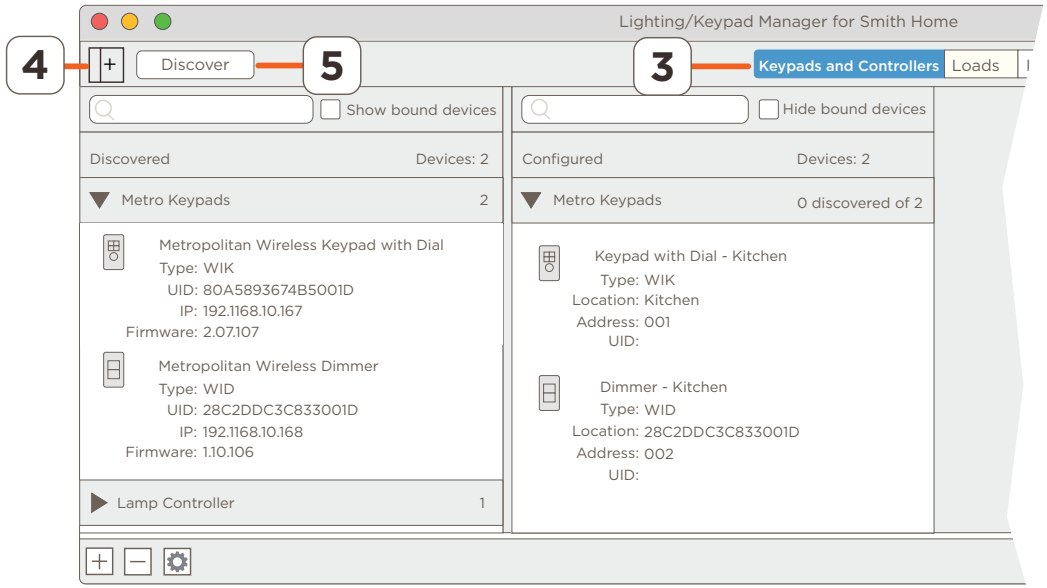
⚠ **IMPORTANT!** Before continuing, it is important to ensure the following is complete. This is true for both methods of bindings:

- The lighting devices are provisioned and communicating with the local Wi-Fi network.
- All lighting devices have been added to a Blueprint configuration on an SDE/MacBook. If they are not, refer to the Adding Keypads to a Blueprint Configuration section.

5.1. Discover the Lighting Devices in Blueprint

Section 5.1 below discovers each lighting device and section 5.2 describes how to set the bindings on each discovered device.

1. If not already, open the Blueprint configuration created in the previous sections above.
2. Open the Lighting/Keypad Manager (**Tools > Savant Lighting and Keypad**).
3. Select the Keypads and Controllers tab.
4. If the Configured window is not open, select the expand icon [+] to open the Discovered window.
5. Select the **Discover** button. The Discovered window will populate with all the devices found.



HELPFUL:

- To expand and view the list of lighting devices that were discovered, select the **disclosure triangle** from within the Discovered window.
- At this point, the discovered devices will match the lighting devices manually added to the configuration file in section 4 above.
- The UID field in the Configured window is blank. This indicates the lighting device is not yet bound.

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5.2. Bind Keypads

With the keypads added to the Blueprint configuration and Discovered by the Lighting/Keypad Manager, the next step is to bind the device (Add UID to the configuration file). Follow the instructions below to do this.

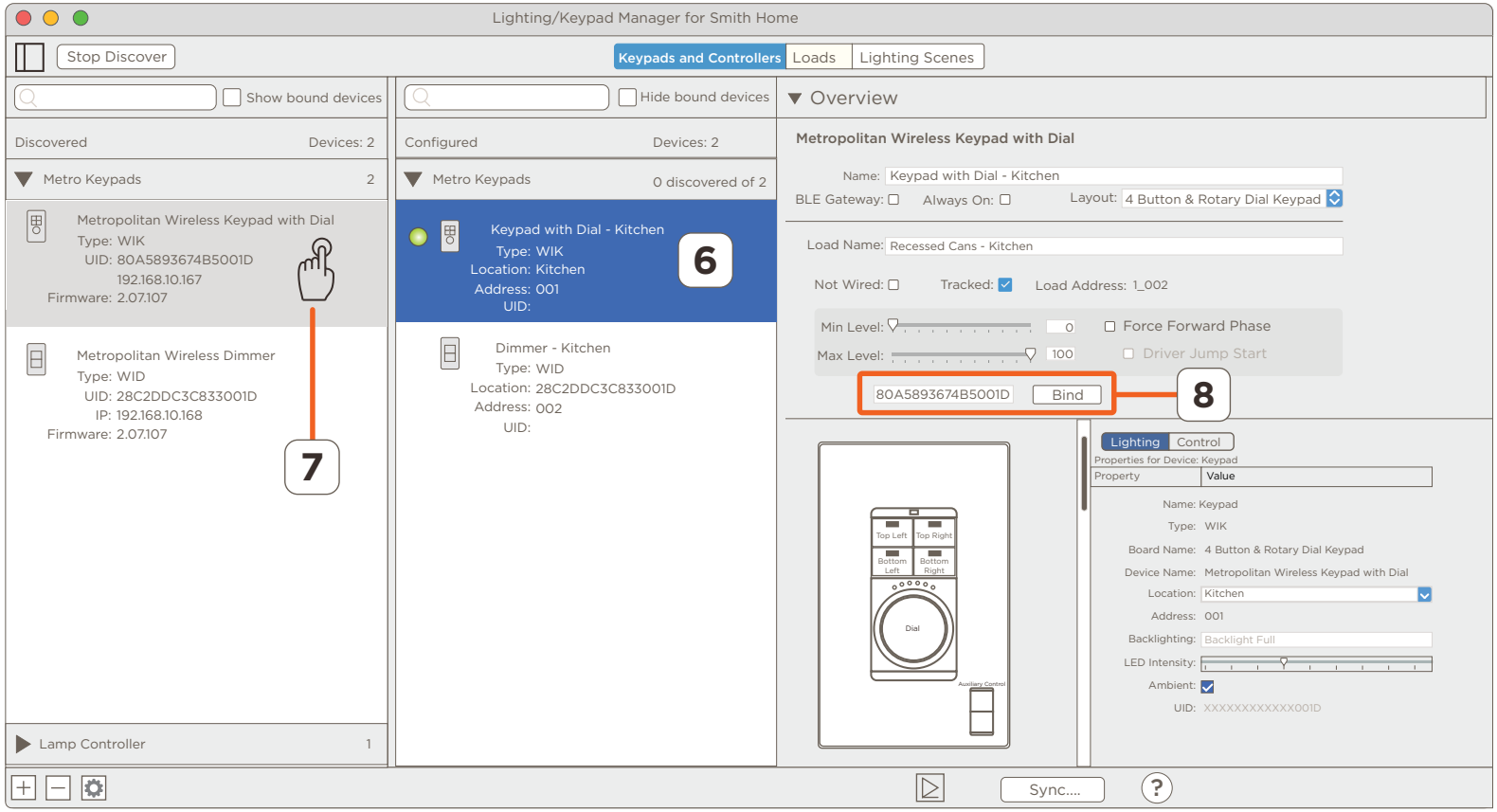
6. Select to highlight one of the lighting devices listed in the Configured window. Note that the UID is not populated.
7. Carry the SDE/MacBook over to the installed lighting device and press one of the buttons on that device. A button press icon will appear alongside the device in the Discovered window (see image below). This indicates a button on that device was pressed. In addition, the Bind button located above the line drawing of the device will become active.

IMPORTANT! During the binding process, if the Lighting/Keypad Manager is not in Discovery mode the manager will not accept the keypad presses and binding will fail. The Discover button must be displaying Stop Discover for the button presses to be acknowledged.

8. Select the **Bind** button. Once selected, the UID will populate itself.

HELPFUL! The bound keypad will now only be displayed in the Configured window and a green LED will appear to the left of it. See image below.

9. Repeat steps 6 - 8 and bind the remaining lighting devices.



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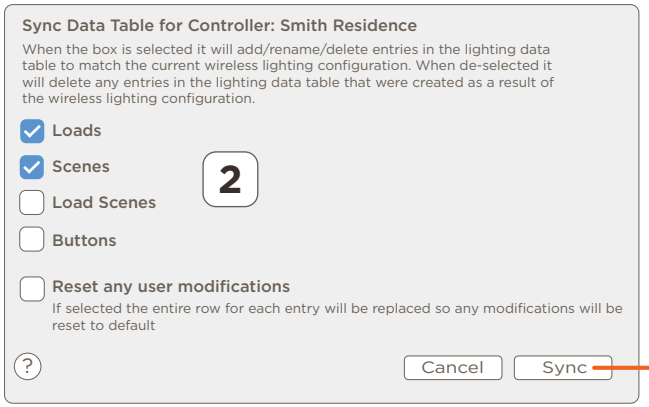
6. Create/Update the Lighting Data Table

The lighting data table is created and updated from within the Lighting/Keypad Manager. Before uploading the configuration to a Savant System Host the data table must be updated. The steps below update the table. Once updated, the configuration can be uploaded.

1. From any tab in the Lighting/Keypad Manager (i.e. Keypads and Controllers, Loads, Lighting Scenes) select the Sync.... button. This opens a Sync Data Table window (See image from previous section).
2. Check or uncheck the appropriate boxes. Use the descriptions in the Learn More section below to determine which boxes to check.
3. Select the Sync button again to update the lighting data table with the keypad and button attributes set in the previous sections (4.1 - 4.2).



NOTE: Savant recommends checking just the Loads and Scenes boxes. Adding checks to the Load Scenes and Buttons boxes increases the number of icons presented in the Savant Pro App. The additional icons make the App look very busy and confusing.

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Boxes for Loads, Scenes, Load Scenes, Buttons
Checked
• An entry for each box checked is added to the lighting data table (Tools > Settings > Lighting). • If the lighting data table already contains an entry for the box checked, that entry is updated with the new information.
Unchecked (Default)
• If an entry for the unchecked box exists in the lighting data table, that entry is removed. • No new entries are added to the lighting data table.

Box for Reset any User modification
Checked - For any boxes that are checked (i.e. Loads, Scenes, Load Scenes, Buttons):
• Changes to entries in the lighting data table are returned to their default values.
Unchecked (Default) - For boxes that are checked (i.e. Loads, Scenes, Load Scenes, Buttons):
• Changes to entries in the lighting data table are left alone. • Changes to entries made in the Lighting/Keypad Manager are updated in the lighting data table. • New entries created in the Lighting/Keypad Manager are added to the lighting data table.

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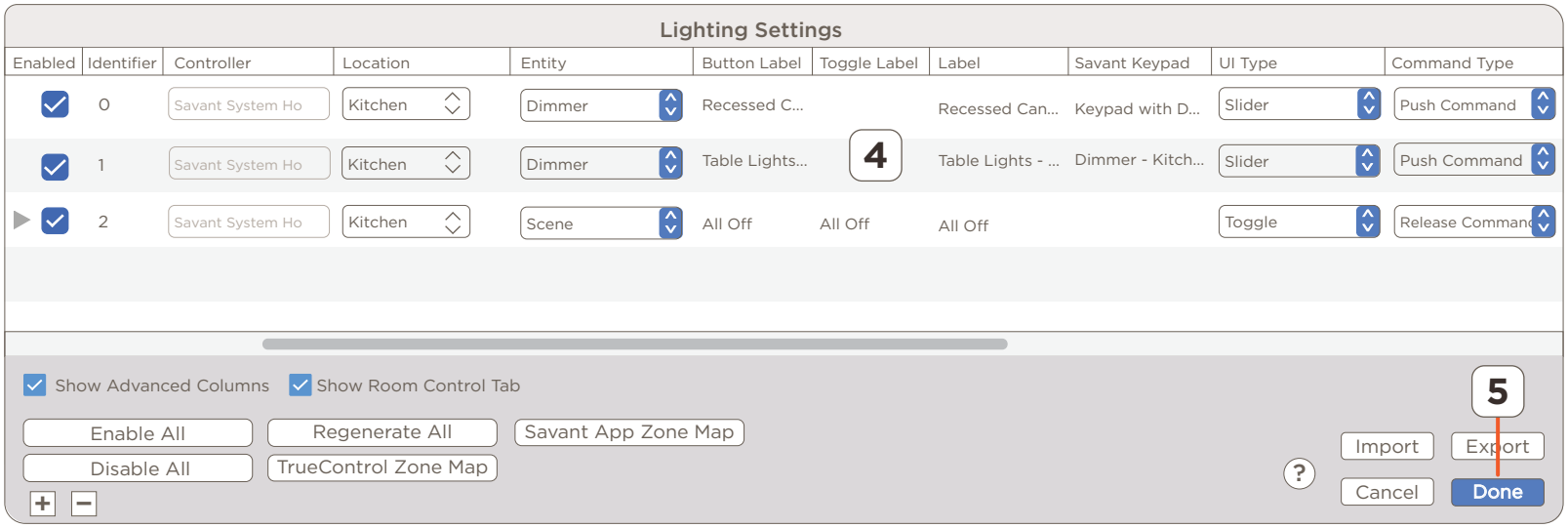
4. Press the Sync button from the previous step. This opens an updated lighting data table (see image below). Verify the changes made are reflected in the table.
5. Select **Done** to close the lighting data table.



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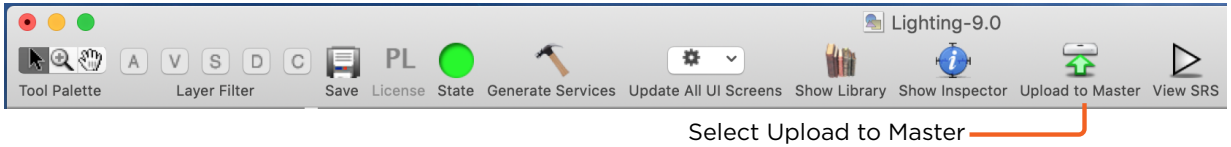
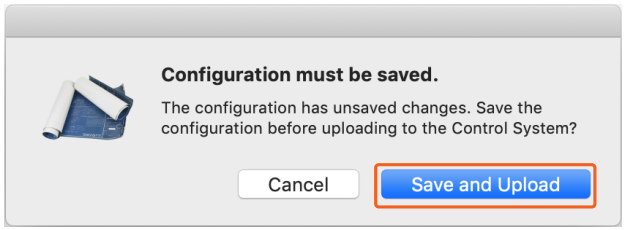
7. Upload the Blueprint Configuration

At this point, the configuration for lighting can be saved and uploaded to the Savant System Host.

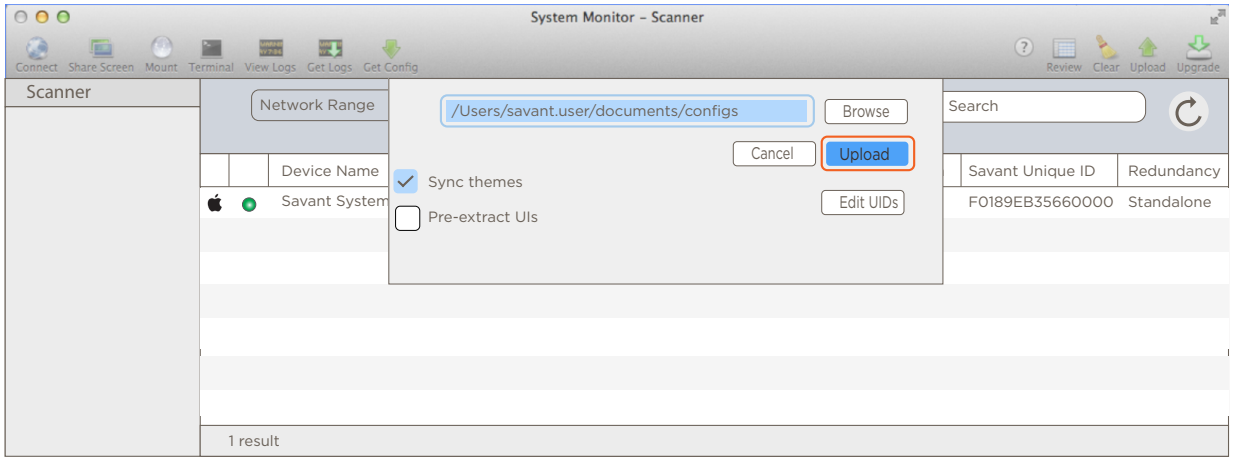
1. Select the **Generate Services** icon from the Blueprint toolbar and the State Icon will change to either Blue or Green. This indicates the services are created.
2. Select Update **All UI Screens > Sync with Services** (only if necessary) to sync the user interfaces such as an iPad to the services created. The State Icon will switch to Green when complete.
3. To upload, select the **Upload to Master** icon from the Blueprint tool bar.



4. In the **Configuration must be saved** dialog box that opens. read the dialog and select **Save and Upload**.



5. The System Monitor application will open as displayed below. Verify the path to the configuration file is correct. Select **Upload** when satisfied. Configuration will now upload to the Host.



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Appendix A: Bind Using the Embedded Web UI

Binding or unbinding is the process of adding or removing the UID of a lighting device to or from a Blueprint configuration file. Every wireless lighting device needs to be bound. If you skipped section 5 above and will be setting the bindings using the embedded Web UI, follow the steps below.

⚠ **IMPORTANT!** Before continuing, it is important to ensure the following is complete. This is true for both methods of bindings:

- The lighting devices are provisioned and communicating with the local Wi-Fi network.
- All lighting devices have been added to a Blueprint configuration on an SDE/MacBook. If they are not, refer to the Adding Keypads to a Blueprint Configuration section.
- An iOS device such as an iPad or iPhone with the latest Savant SmartConnect application loaded is available.
- If required, the **Smartconnect Software Reference Guide (009-1046)** is available on the Savant Customer Community.

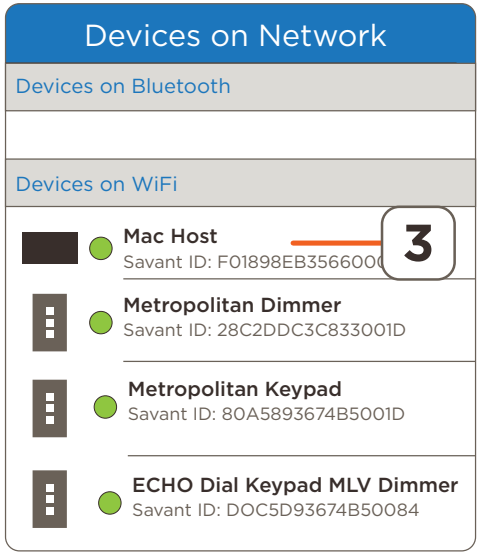
Download and Install the SmartConnect Application

If the SmartConnect application is not already installed onto your iOS device, it can be downloaded from the Apple App store and installed on your iOS device. To locate the app, go to the iTunes store and search for Savant LLC. Once located, the SmartConnect app will be listed.

Bind Keypads - Open the Host

With the lighting devices added to the configuration and the SmartConnect Application installed, the binding process can begin.

1. Connect the iOS device to the local wireless network. This should be the same network the Host is currently communicating on.
2. Open the SmartConnect application.
3. Locate and select the Host from the list in the Devices on WiFi window. Hosts are labeled either Mac or Smart Host (see image to the right). This will open the a Web UI for the Host.



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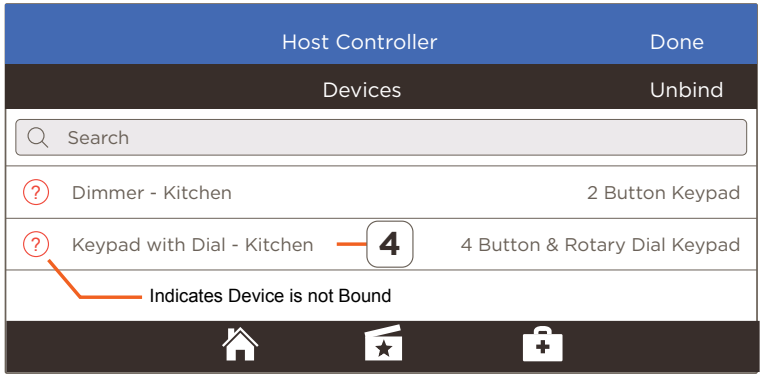
Bind Keypads - Are Keypads Bound?

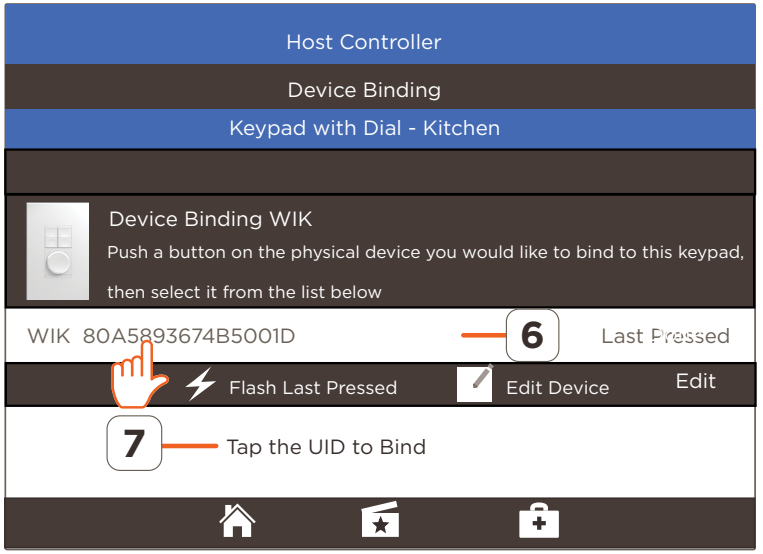
All lighting added to the Blueprint configuration in the previous sections (4.1, 4.2) will be listed in the Devices window that opens (see the image to the right). A red question mark indicates the device is NOT bound. Any devices with a red question mark need to be bound. Follow the steps below to bind.

4. In the Devices page from the Web UI that opens, select one of the lighting devices from the list. This opens the Device Binding page.



Bind Keypads - Locate Device and Bind

5. Carry the iPad or iPhone over to the installed hardware (WIK in this example).
6. Press one of the buttons on the lighting device and the UID for that device will appear in SmartConnect.
7. Tap the UID. A confirmation page will open and display that a **logical address is bound to a physical device**. At this point, the device is bound.
8. Repeat steps 4-7 and bind the remaining keypads.



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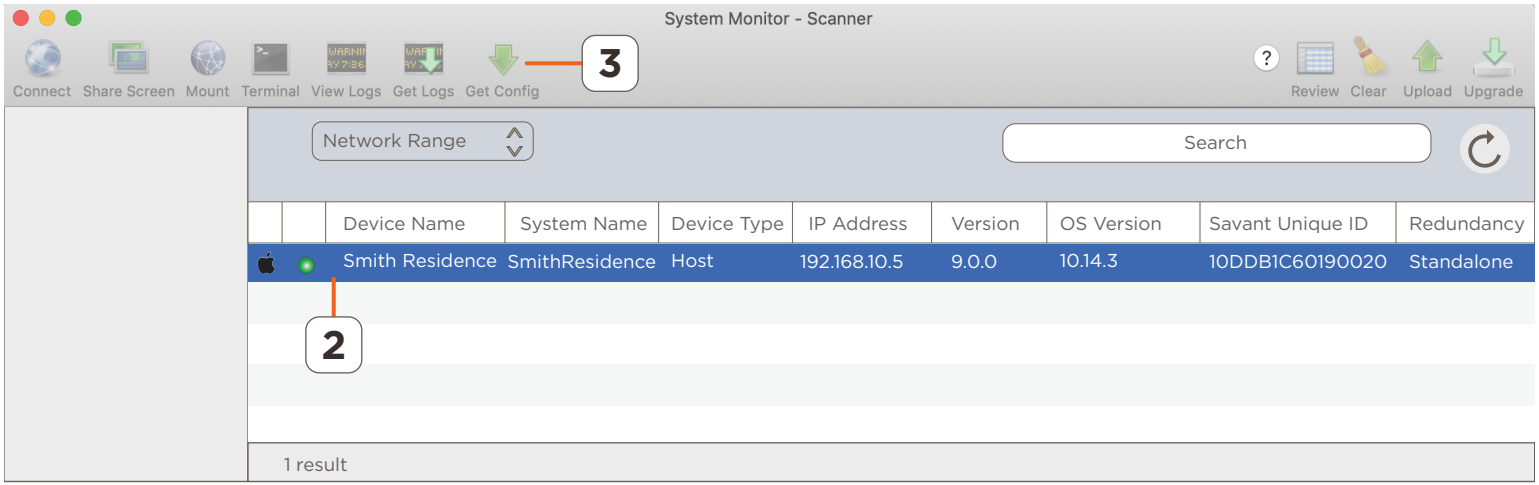
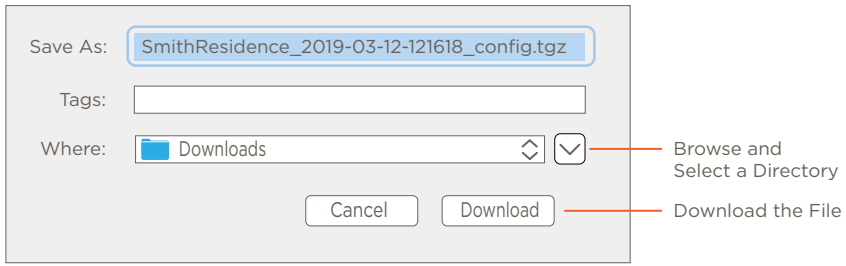
Bind Keypads - Export the Configuration

With the lighting devices now bound to the configuration running on the Host, Savant recommends exporting that file from the Host. The exported file will be a configuration file with all the bindings intact (UIDs added to the file). This file can be used in the future in case any problems arise and the bindings set on the Host are lost.

1. Open System Monitor.
2. Select to highlight the Host.
3. Select the **Get Config** icon from the System Monitor toolbar.



4. Download the file to a directory. The file is saved as: **<configuration file>.tgz**.



IMPORTANT! As updates are made to the configuration running on the Host, Savant recommends exporting each time the file is updated. This will ensure the latest file with bindings is always available.

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Appendix B: Additional Binding Techniques

As described in section 5 above, there are a few ways to bind the lighting devices to the configuration file. Appendix B: describes each of the methods.

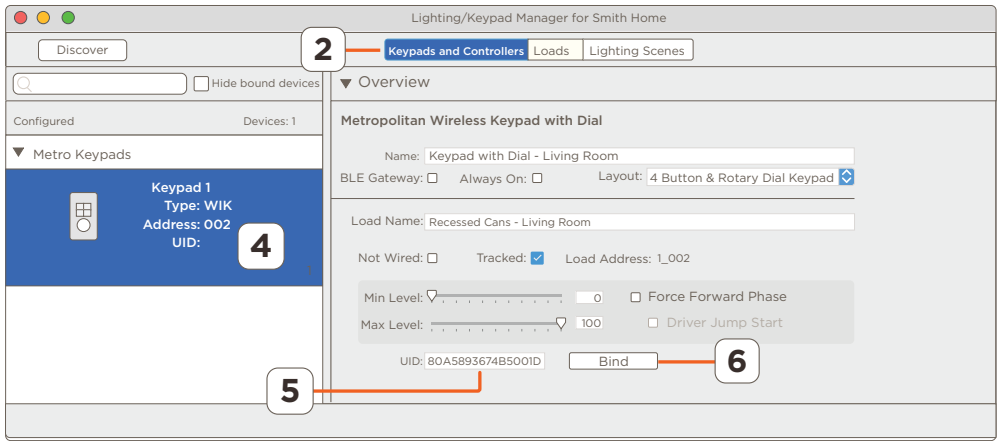
Enter UID directly into UID field in Blueprint

When the UID of each lighting device in the system is known, that UID can be manually entered into the UID field in the Lighting/Keypad Manager. This method is recommended when replacing or adding one or two lighting devices since the user typically knows where the keypads being installed or replaced are located and what their UID's are.

Tools Required:

- SDE/MacBook with a Blueprint configuration loaded and running that contains lighting.
- Lighting devices being added must be installed and provisioned to the local Wi-Fi network.
- UID and location of each lighting device must be known.

1. Open Blueprint and load a configuration that contains lighting.
2. Open the Lighting/Keypad Manager (**Tools > Savant Lighting and Keypads**) and select the **Keypads and Controllers** tab.
3. Refer to section 4: above Adding Keypads to a Blueprint Configuration and add the lighting device to an existing configuration. Add basic information such as labels and location (not shown in image).
4. Select to highlight the device.
5. Manually enter the UID into the **UID:** field.
6. Move the cursor off the UID field. Once off the UID field, the UID is automatically added to the configuration and the device is bound.



HELPFUL! Note that the bind button to the right of the UID field changes to Unbind. When button displays Unbind, this indicates the device is currently bound.

7. This adds the UID to the configuration file (Binds device being added).
8. Select the **Sync** button and add the updates to the lighting data table. Refer to section 6: Create/Update the Lighting Data Table (Sync button not shown in image).
9. Upload the updated configuration with the added keypad(s). See section 7: Upload the Blueprint Configuration.
10. Open the Pro App, select the lighting service, and verify the added keypads are operating correctly.

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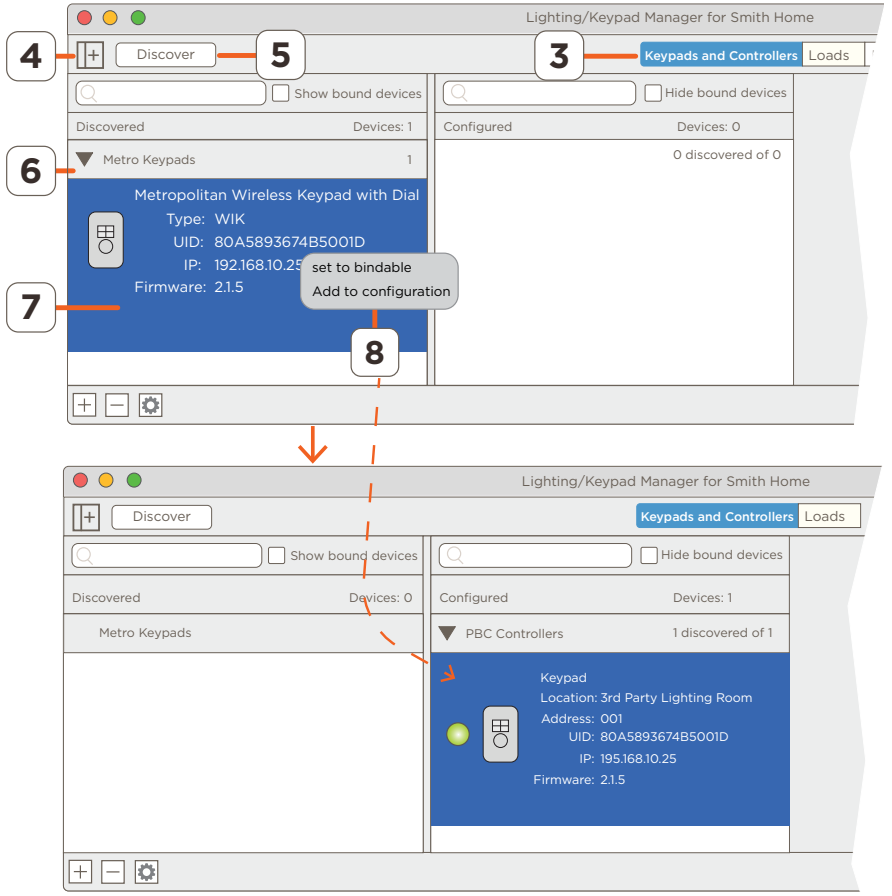
Use Discovery Method (Alternative to section 5 above)

Section 5 described how to use the Discovery method in the Lighting/Keypad Manager to bind the keypads by pressing a button on the hardware and acknowledging that button press. The method described below uses the Discovery process described in section 5. However, the bind process is slightly different. The process described below adds the discovered device directly to the configuration without having to find the hardware. This process is recommended when keypads are installed and the UID and their location is known. Typically, adding only a few keypads works well with this process.

Tools Required:

- SDE/MacBook with a Blueprint configuration loaded and running that contains lighting.
- Lighting devices being added must be installed and provisioned to the local Wi-Fi network.
- UID and location of each lighting device must be known.

1. Open a Blueprint configuration that contains lighting.
2. Open the Lighting/Keypad Manager (**Tools > Savant Lighting and Keypads**).
3. Select the **Keypads and Controllers** tab.
4. Select the expand window icon  to open the Discovered field.
5. Select the **Discover** button. This will scan the local network and locate all the Metropolitan, ECHO, and Lamp Controller lighting devices. Select the **Stop Discover** button when all devices are found.
6. Expand one of the lighting device fields. The Metro Keypads field was selected in this procedure (see diagram to the right).
7. Select to highlight one of the Metropolitan devices.
8. Right click the highlighted device and select **Add to configuration**. At this point, the controller will move to the Configured field. Note that the UID field in the Lighting/Keypad Manager automatically gets populated with the UID of the device. This indicates the device is bound.



LEARN MORE

The LED that appears next to the device indicates the state of the lighting device.

- **Green LED** - Device was discovered and is bound to the configuration loaded in Blueprint.
- **Yellow LED** - The device was not discovered but is bound to the configuration loaded in Blueprint. The device was not discovered because the discovery process was never run.
- **Red LED** - The device was not discovered and is not bound. The discovery process was run but device was not found.

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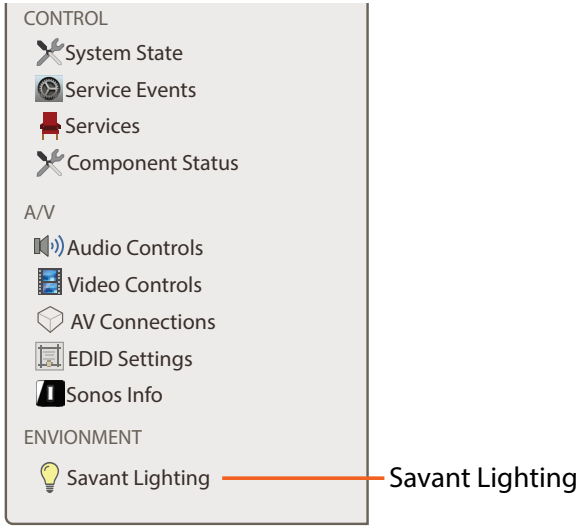
Bind using Web UI in System Monitor

When an iPad, iPhone, or the SmartConnect application is not available, the embedded Web UI in the System Monitor utility can be used to bind the lighting devices. Follow the steps below to bind using System Monitor.

Tools Required:

- SDE/MacBook with the Savant Application Manager (SAM) utility installed. System Monitor is available through SAM.
- Lighting devices being added must be installed and provisioned to the local Wi-Fi network.
- The configuration file with all lighting devices created should be uploaded and running on the Host.

1. Add the SDE/MacBook to the local Wi-Fi network. This is the same network the Savant Host is communicating on.
2. Open SAM (Savant Application Manager).
3. From the menu bar, select **Launch > System Monitor**.
4. From the System Monitor scanner window, double-click the Savant Host. This will open the System Status window.
5. Select the **Savant Lighting** icon from the leftmost panel.
6. From the Devices page that opens, bind each of the lighting devices. Refer to Appendix A: Bind using Embedded Web UI above. The instructions for binding from the Web UI in System Monitor is the same as binding using the Web UI opened through Smart Connect. The difference is the utility used to open it (System Monitor -vs- SmartConnect).



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Appendix C: Firmware Updates

Once a lighting device is bound to the configuration loaded on a Host, if there is a firmware update available for the devices, the firmware will momentarily begin loading. During the update, the following will indicate a firmware update is happening:

Metropolitan Style

- All LED's on the front panel of the device will illuminate solid and remain lit during the update process.

Echo Style

- The last LED in the strip of LEDs on the front panel of the Echo device will blink green during the update process.

Alert in SmartConnect

- When using SmartConnect to bind, once the firmware begins loading, a red ribbon (shown below) will appear in the Web UI interface of SmartConnect. See image below.

HELPFUL

The progress of the update can also be viewed through one of the following:

- **Smart Connect Application** - Firmware update progress can be viewed in the embedded Web UI accessed through the SmartConnect Application.
  1. Open SmartConnect App.
  2. Locate and select the Savant System Host for your network under the **Devices on Wi-Fi** window.
  3. Select the **System Health** icon at the bottom of the Devices page.
  4. Select **Firmware Upgrade** field. All lighting devices receiving an upgrade will be listed in the window that opens.
- **System Monitor** - Firmware update progress can be viewed in the embedded Web UI accessed through the Savant Lighting tab.
  1. Open System Monitor.
  2. In the Scanner window, double-click the Host to open the System Status window for that Host.
  3. Select the **Savant Lighting** tab.
  4. Select the **System Health** icon at the bottom of the Devices page.
  5. Select **Firmware Upgrade** field. All lighting devices receiving an upgrade will be listed in the window that opens.

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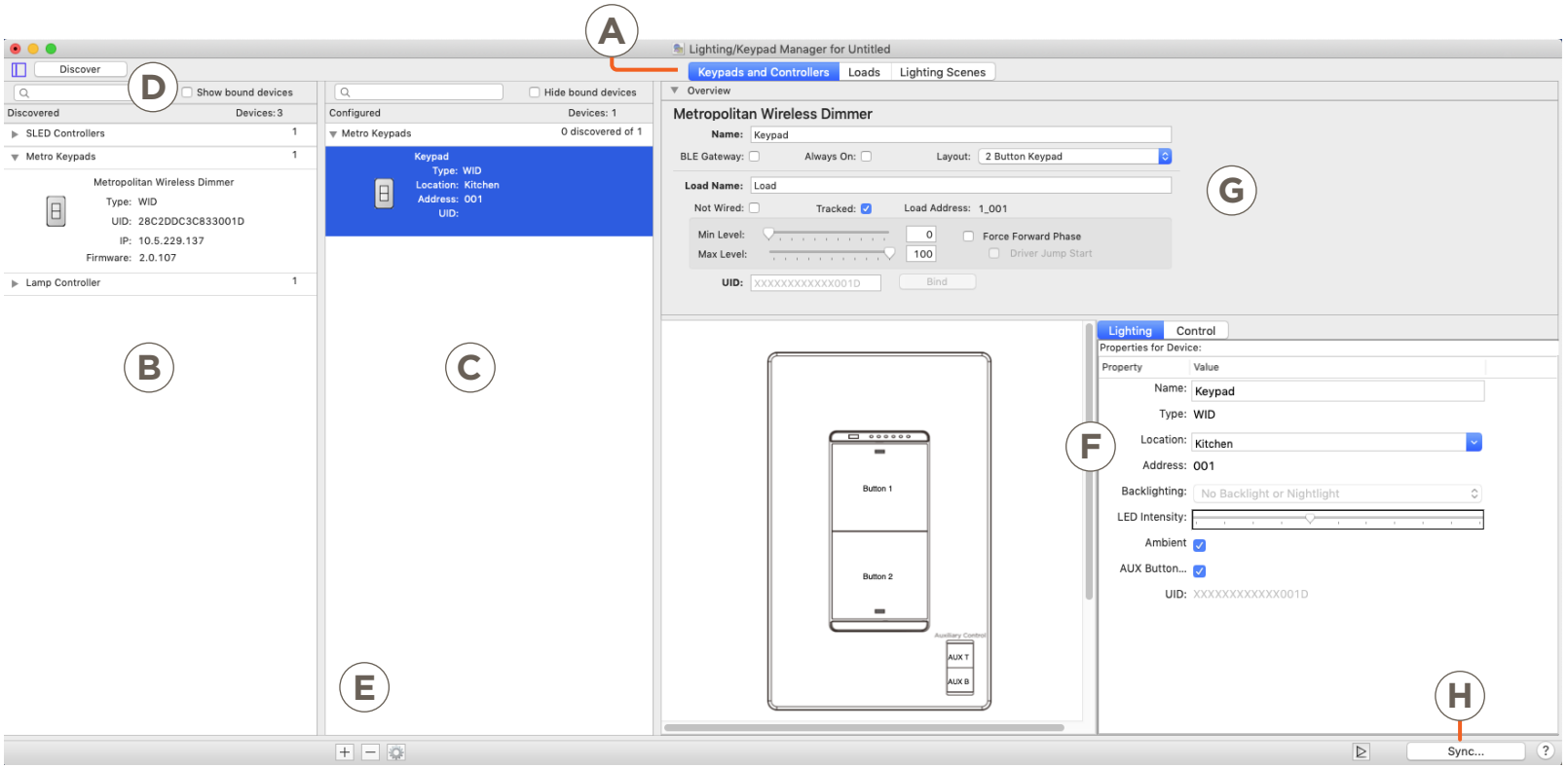
Appendix D: Lighting Manager Descriptions

The descriptions below are very high level. See the **Savant Lighting Programming Guide (009-1810)** for more advanced information on each of the fields.



A	Select to open the Keypads and Controllers tab. Any information regarding configuring a lighting device and its associated buttons are set using one of the windows on this page. Each of the windows are described below. Binding the devices to a configuration file is also completed using the windows within this tab.
B	**Discovered Window** - Lists all the devices that are provisioned to the local network and were discovered by the Lighting and Keypad Manager. Both wired and wireless devices are listed. • **Discover Button** - Select this button to start the discovery (scan) process. Once all devices are discovered, select the **Stop Discover** button to stop the scan. • **Open/Close Discovered Window Icon** - Select this icon to open the Discovered window. Select again to close the window. • **Show Bound Devices check box (Default = unchecked)** - When unchecked, any devices that are bound to the Blueprint configuration file will not appear in the Discovered Window. When checked, all devices appear in the Configured window. Having the box unchecked is a good way to keep track of which devices are bound and which are not. • **Devices:** - The number of devices found during the discovery process is displayed. This count includes both wired and wireless lighting devices. • **Lighting Device Fields** - Each lighting device is separated by type. For example, all Metropolitan Keypads are listed under Metro Keypads and all Echo style keypads are listed under Echo Keypads.

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Configured Window - Any devices that appear in the Configured window are added to the configuration running in Blueprint.

- **Hide bound devices (default = unchecked)** - When unchecked, all devices that are bound will appear in the window. Adding a check to the box will hide any devices that are bound. Adding a check to hide the bound devices is a quick way to keep track of any bound vs. unbound devices that were added to the configuration running in Blueprint.
- **Devices:** - The number of devices found during the discovery process is displayed. This count includes both wired and wireless lighting devices.
- **Lighting Device Fields** - Each lighting device is separated by type. For example, all Metropolitan Keypads are listed under Metro Keypads and all Echo style keypads are listed under Echo Keypads.
- Various icons will appear depending on the state of the device. Below are descriptions for each of the icons.

C

	The device was discovered and it is bound to the configuration loaded in Blueprint.
	The device was not discovered but is bound to the configuration loaded in Blueprint. The device was not discovered because the Discovery process was not run.
	The device was not discovered. The discovery process was run but the device was not found.
No Icon	The device is not bound.
	Indicates that device is set up to function as a Bluetooth (BLE) gateway. When the device with this icon associated with it is selected, a Savant Smart Groups window will open. BLE Smart bulbs are configured in this window.

D

The Add and Remove icons are used to add or remove a lighting device from the Configured window.

- Select the Add icon to open a drop down window where users can add lighting devices to the configuration.
- Select the remove icon to remove a device from the window.
- The gear icon opens a menu with the following selections:
  - **Expand or Collapse All** - Expands or collapses all fields in the Configured window.
  - **Group by Device or Location** - The fields in the Configured window can be modified so the lighting devices are grouped by where they are located in the home (zone) or by device type (Metro (Metropolitan), Echo, Lamp Controller, etc.)
  - **Unbind All** - Unbinds all devices listed in the Configured window from the configuration (removes UID from configuration file).
  - **Remove All** - Removes all lighting devices listed in the Configured window from the configuration.

E

Attributes for each lighting device and its associated buttons are configured using these three windows. To configure the attributes of each button, select that button to highlight red. Once highlighted, select either the Lighting or Control tab and set each of the relevant fields. Descriptions for each of the fields in these windows are available in the Savant Lighting Programming Guide (009-1810).

F

Advanced features are set in these fields. See the Savant Lighting Programming Guide (009-1810) for descriptions of these fields.

G

Once all fields for the keypad and associated buttons are set, the Sync button will add these settings to the Lighting Data Table. See the Create/ Update the Lighting Data Table section above for more information on this.

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Appendix E: Network Requirements

Savant requires the use of business class/commercial grade network equipment throughout the network to ensure the reliability of communication between devices. These higher quality components also allow for more accurate troubleshooting when needed.

Device Network Connections

Connect all Savant devices to the same local area network (LAN) or subnet as the Host. Savant recommends not implementing any type of traffic or packet shaping in your network topology for the Savant devices as this may interfere with performance.

Managing IP Addresses

To ensure that the IP Address will not change due to a power outage, a static IP Address or DHCP reservation should be configured. Savant recommends using DHCP reservation within the router. By using this method, static IP Addresses for all devices can be managed from a single UI avoiding the need to access devices individually. Setting DHCP reservation varies from router to router. Refer to the documentation for the router to configure DHCP reservation.

Network Changes

The wireless lighting products require resetting each device to its factory defaults (AP Mode) after moving to a new network, changing routers, or if the IP Address range is changed in the current router. This process is described below.

Metropolitan Style:

1. Remove the front faceplate.
2. With a pointed object such as a paper clip, press and hold the reset button on the front panel for five seconds until all LED's illuminate solid; then release.
   - When the reset button is released, all LED's on the front panel will blink twice and device will reset.
   - After the reset, two of the button LED's on the front panel will blink in an alternating pattern. This pattern indicates the device is set back to factory defaults and device is now in AP Mode. Once in AP Mode, the device will need to be provisioned again.

   NOTE: The location of the LEDs that blink will differ depending on the type of device (e.g. dimmer, switch, keypad).

Echo Style:

1. Remove the front faceplate.
2. With a pointed object such as a paper clip, press and hold the reset button on the front panel for five seconds until all the button LED's illuminate solid; then release.
   - When the reset button is released, all LED's on the front panel will flash the following colors: (red, green, blue, white, stop).
   - After the reset, the LEDs on the front panel that indicate intensity or volume will blink red in an alternating pattern (three LEDs on left and then three LEDs on the right) and continue back and forth. This indicates the device is set back to factory defaults and is in AP Mode. Once in AP Mode, the device will need to be provisioned again.

   NOTE: The location of the LEDs that blink differ depending on the type of device. The multi-button keypad will have the LED array at the top. The dial keypad will have it around the dial.

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