

# SAVANT

## Savant® Low Voltage Keypads

PWM-ENC3 | SKL-3040 | SKL-1010 | WPB-xxLV06 | WPK-xxLV05 | WPB-xxLV02

### Deployment Guide

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Document Number: 009-1731-00

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Document Date: March 2019

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Document Supports: da Vinci 9.0

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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 technical documentation can be 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

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

### Electric Shock Prevention

 <b>ELECTRIC SHOCK!</b>	The source power poses an electric shock hazard that has the potential to cause serious injury to installers and end users.
 <b>ELECTRICAL DISCONNECT:</b>	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

 <b>WEIGHT INJURY!</b>	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 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. Use only 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 a damaged power supply cord or plug, liquid being spilled or objects having fallen into the apparatus, the apparatus being exposed to rain or moisture, apparatus having been dropped, or other failure to operate normally.
14. To completely disconnect equipment from AC mains power, 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 insure 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.

# 1. Introduction

This guide will guide the installer through the process of installing, configuring, and adding Savant Low Voltage Keypads to a Blueprint configuration.

## Before You Begin

Read through this document in its entirety and ensure that the following required items are available:

- Echo Low-Voltage Keypads.....
- Low-Voltage Keypad Controller(s) (w/ enclosure if required).....   
(SKL-3040 or SKL-1010)
- Savant Host licensed and running da Vinci 9.0 or higher.....
- Savant Development Environment (SDE/MacBook®) .....   
Running da Vinci 9.0 or higher.
- Lighting or other devices to be controlled by the keypads.....

## Deployment Steps

Follow these steps to successfully deploy Savant Low Voltage Keypads. This page can be used as a checklist to record which steps have been completed.

- Review product specifications and connection details .....
- Install Low-Voltage Keypad Controller.....
- Install Echo Low-Voltage Keypads.....
- Add Keypads into a RacePoint Blueprint® configuration .....
- Bind Keypads to the Configuration .....
- Upload and Test Configuration.....

## 2. Equipment Overview

### 2.1. PWM-ENC3

#### Box Contents

- (1) Enclosure (PWM-ENC3)
- (1) Enclosure Cover with Handles (093-3046-xx)
- (4) M4 x 6mm Phillips - Front Cover Screws (039-0383-xx)
- (2) WAGO 6-Position Push Connector (028-0815-xx)
- (1) Quick Reference Guide

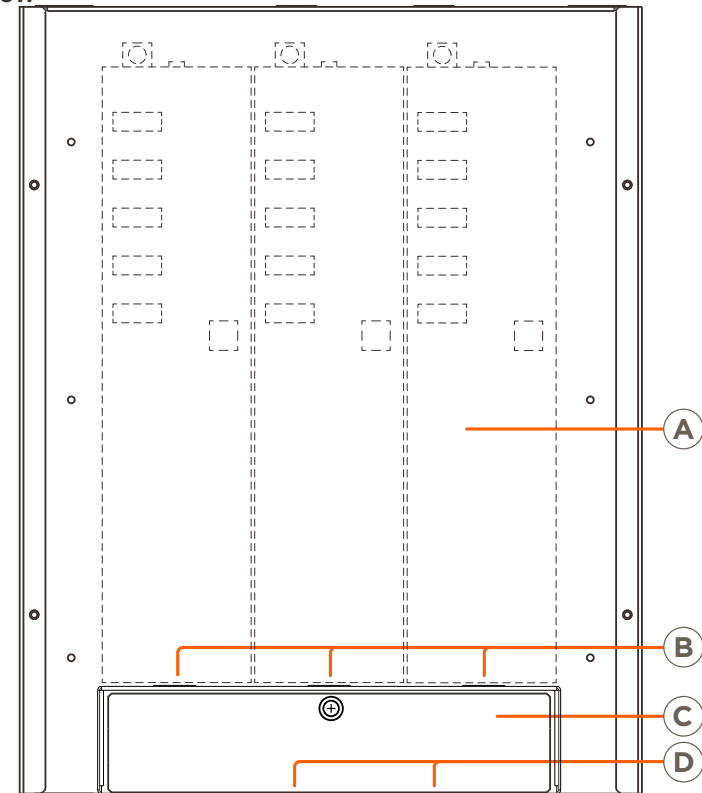
#### Additional Required Items

- One, Two, or Three Savant 40 Keypad Power and Control Module (SKL-3040)
- Up to 40 Savant Echo Low-Voltage Keypads per Module.

#### Specifications

Environmental				
Temperature	32° to 104° F (0° to 40°C)			
Humidity	10% to 90% (non-condensing)			
Dimensions and Weights				
	Height	Width	Depth	Weight
Enclosure	18 in (45.72 cm)	14.25 in (36.20 cm)	3.5 in (8.89 cm)	14.55 lbs (6.60 kg)
Enclosure with Cover	19 in (48.26 cm)	15.25 in (38.74 cm)	4.72 in (11.99 cm)	15.85 lbs (7.08 kg)
Shipping	21.0 in (53.34 cm)	17.0 in (43.18 cm)	5.0 in (12.7 cm)	16 lbs (7.26 kg)
Regulatory				
RoHS	Compliant			
Minimum Supported Release				
Savant OS	da Vinci 9.0			

#### Front View



- A** The PWM-ENC3 enclosure supports up to three (SKL-3040) 40 Keypad Power and Control Modules. The Keypad Modules are not included with the enclosure and need to be purchased separately.
- B** Three 1/2 inch electrical knockouts. Prior to installing the keypad module, remove the knockout associated with the module being installed and snap in the 1/2 inch nylon bushing supplied with each Keypad module.
- C** AC Compartment cover. To remove the cover, turn the captive panel screw counterclockwise (CCW) until the screw pops up and out of the threaded insert. Slide cover up and then out away from the enclosure.
- D** Electrical knockouts (1/2 inch) for supplying power from a breaker panel or similar. Remove appropriate knockout(s) and install cable clamp.

## 2.2. SKL-3040

### Box Contents

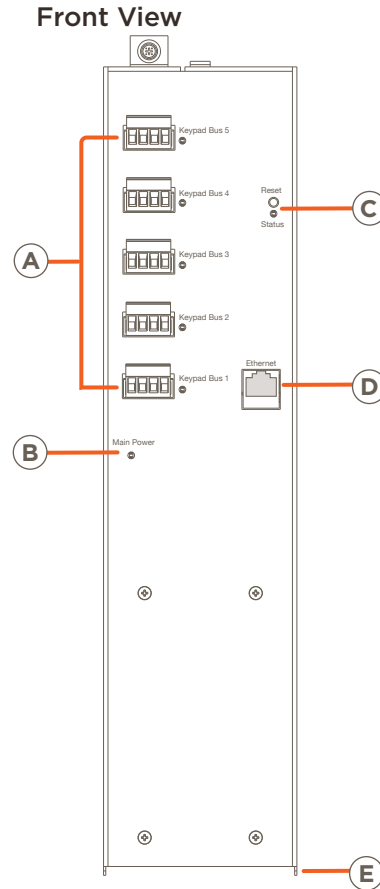
- (1) 40 Keypad Power and Control Module
- (5) 4-pin Screw Down Plug-in Connectors
- (1) Quick Reference Guide

### Additional Required Items

- 3-Unit Power Module Enclosure (SHA-PEN3C/PWM-ENC3) per every 3 SKL-3040
- Up to 40 Savant Echo Low-Voltage Keypads per Module.

### Specifications

Environmental	
Temperature	32° to 104° F (0° to 40°C)
Humidity	10% to 90% (non-condensing)
Dimensions and Weights	
Height	12.35 (31.37 cm)
Width	3.43 in (8.71 cm)
Depth	2.25 in (5.72 cm) - including connectors
Weight	Shipping: 3.30 lbs (1.50 kg)
Power	
Input	120-240V AC 50/60Hz (7.2 A)
Output Power	24V DC 2A per keypad bus
Maximum Wiring Distance (per keypad bus)	
#14 AWG	Max = 1000 ft (304.8 m)
Use of Shade or Low-Voltage Keypad Wire (SHA-W1000-00) is recommended	
Regulatory	
RoHS	Compliant
Minimum Supported Release	
Savant OS	da Vinci 9.0



**Keypad Bus (1-5)** - The 40 Keypad Power and Control Module supports up to 10 low-voltage keypads per bus, wired in series/"daisy-chained" with a total of up to 40 keypads per module.

(A)

**Keypad Bus Status LED** - Green: normal, Amber: Keypad Address Discovery mode

(B)

**Main Power LED** - Green light indicates power is connected, off indicates power has been removed.

**Reset** - Using a paperclip or similar, press to reset unit and discover keypads, press and hold (5 seconds) to default network settings.

### Status LED

(C)

- **No Network Connection** - .5 second blink, 1.5 second off.
- **No Host Connection** - 2 rapid blinks.
- **Host Connected** - On (solid green).
- **Firmware Upgrade in Progress** - long blink with short off.

(D)

**Ethernet** - Connect to network via CAT5/5E/6.

(E)

When installing 40 Keypad Power and Control Module into enclosure, use tabs to align. Refer to Keypad Module Installation section for further details.

## 2.3. SKL-1010




### Box Contents

- (1) 10 Keypad Power and Control Module
- (1) 4-pin Screw Down Plug-in Connectors
- (1) Power Supply
- (1) Product Info and Safety Insert

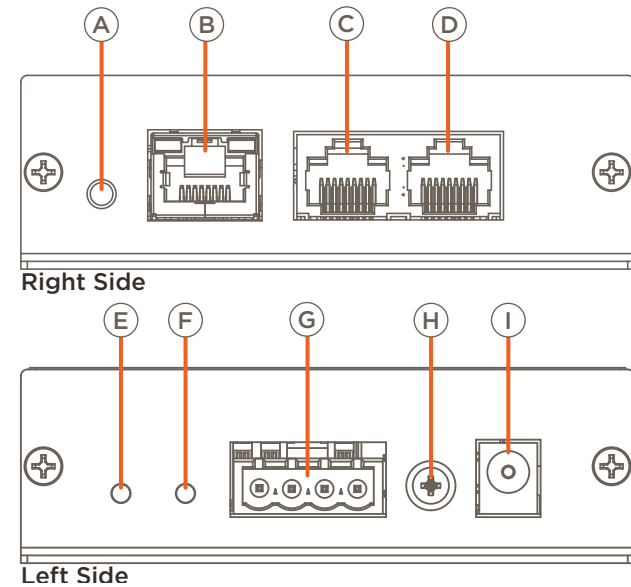
### Additional Required Items

- Up to 10 Savant Echo Low-Voltage Keypads per Module.

### Specifications

Environmental			
Temperature	32° to 104° F (0° to 40°C)		
Humidity	10% to 90% (non-condensing)		
Dimensions and Weights			
Height	3.80 in (9.64 cm)		
Width	5.65 in (14.35 cm)		
Depth	1.06 in (2.68 cm) - including connectors		
Weight	Shipping: 3.30 lbs (1.50 kg)		
Power			
Input	24V DC		
Output Power	48 W		
Maximum Wiring Distance (per keypad bus)			
#14 AWG	Max = 1000 ft (304.8 m)		
Use of Shade or Low-Voltage Keypad Wire (SHA-W1000-00) is recommended			
Regulatory			
Safety and Emissions	FCC Part 15B 	CE Mark 	C-Tick 
RoHS	Compliant		
Minimum Support Requirements			
Savant OS	da Vinci 9.0		

### Side Views






- Reset Button** - Resets the network settings of the device. Hold Reset Button for 5 seconds while powered on to clear network settings. Status LED will rapidly blink red when reset is complete.
- (A) Button** for 5 seconds while powered on to clear network settings. Status LED will rapidly blink red when reset is complete.
- (B) Ethernet** - Connect to network via CAT5/5E/6.
- (C) Bus In** - Reserved for future use.
- (D) Bus Out** - Reserved for future use.
- Status LED**
  - **No Network Connection** - .5 second blink, 1.5 second off.
  - (E) No Host Connection** - 2 rapid blinks.
  - **Host Connected** - On (solid green).
  - **Firmware Upgrade in Progress** - long blink with short off.
- (F) Keypad Power LED** - Green: normal, Amber: Keypad Address Discovery mode
- (G) Keypad Bus** - 4-Pin connector for wiring Echo Low-Voltage keypads.
- (H) Ground** - Chassis Ground (optional)
- (I) Power Input** - 24V DC

## 2.4. WPB-xxLV02

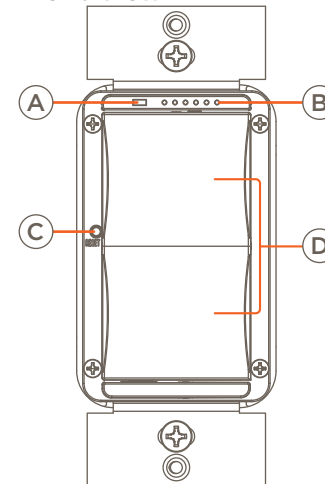
### Box Contents

- (1) Echo Low-Voltage Paddle Keypad (WPB-xxLV02-00)
- (1) Cable Control Station Pigtail 5-Pin (064-0456-00)
- (1) Product and Regulatory Insert

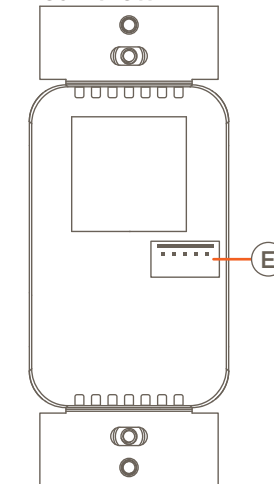
### Specifications

Environmental	
Temperature	32° to 104° F (0° to 40°C)
Humidity	10% to 90% (non-condensing)
Dimensions and Weights	
Height	4.13 in (10.50 cm)
Width	1.72 in (4.36 cm)
Depth	0.97 in (2.46 cm)
Weight	Shipping: 0.6 lbs (0.27 kg)
Power	
Input	24V DC 2A
Avg Power	0.5 Watts
Max Power	1.4 Watts
Regulatory	
Safety and Emissions	FCC Part 15B  CE Mark  C-Tick 
RoHS	Compliant
Minimum Support Requirements	
Savant OS	da Vinci 9.0

### Front View



### Rear View



- A Ambient Light Sensor** - Detects the level of ambient light in the room and adjusts the LED brightness on the front panel. The ambient light sensor operation is modified using RacePoint Blueprint®.
- B Dimming Level** - Six indicator LEDs track the brightness of the load. LEDs turn on from left to right as intensity on load increases and turns off from right to left as intensity decreases. Once configured in Blueprint, the LEDs track the brightness of the scene configured.
- C Reset Button** - The reset button has two functions:
  - Press and release the reset button will reboot the keypad.
  - Press and hold the reset button for five seconds will Factory reset the keypad. This will erase the stored keypad address.
- D Buttons** - Two buttons programmable with Blueprint.
- E Station Control Connection** - 5-Pin female port for the Cable Control Station Pigtail to be connected.






## 2.5. WPK-xxLV05

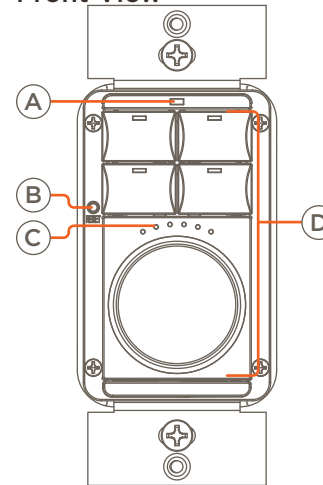
### Box Contents

- (1) Echo Low-Voltage Dial Keypad (WPK-xxLV05-00)
- (1) Cable Control Station Pigtail 5-Pin (064-0456-00)
- (1) Product and Regulatory Insert

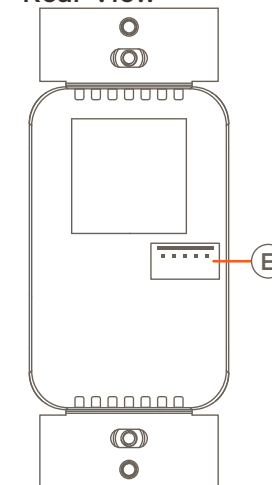
### Specifications

Environmental	
Temperature	32° to 104° F (0° to 40°C)
Humidity	10% to 90% (non-condensing)
Dimensions and Weights	
Height	4.13 in (10.50 cm)
Width	1.72 in (4.36 cm)
Depth	1.24 in (3.15 cm)
Weight	Shipping: 0.6 lbs (0.27 kg)
Power	
Input	24V DC 2A
Avg Power	0.5 Watts
Max Power	1.4 Watts
Regulatory	
Safety and Emissions	FCC Part 15B  CE Mark  C-Tick 
RoHS	Compliant
Minimum Support Requirements	
Savant OS	da Vinci 9.0

### Front View



### Rear View



**A Ambient Light Sensor** - Detects the level of ambient light in the room and adjusts the LED brightness on the front panel. The ambient light sensor operation is modified using RacePoint Blueprint®.

**B Reset Button** - The reset button has two functions:

- Press and release the reset button will reboot the keypad.
- Press and hold the reset button for five seconds will Factory reset the keypad. This will erase the stored keypad address.

**C Dimming Level** - Six indicator LEDs track the brightness of the load. LEDs turn on from left to right as intensity on load increases and turns off from right to left as intensity decreases. Once configured in Blueprint, the LEDs track the brightness of the scene configured.

**D Buttons** - Four buttons and a dial. With status LED on the four buttons.




**E Station Control Connection** - 5-Pin female port for the Cable Control Station Pigtail to be connected.

## 2.6. WPB-xxLV06

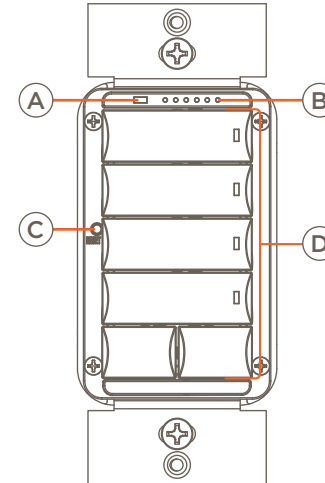
### Box Contents

- (1) Echo Low-Voltage Configurable Keypad (WPB-xxLV06-00)
- (1) Cable Control Station Pigtail 5-Pin (064-0456-00)
- (2) Echo Configurable Keypad Double Button (074-0763-00x)
- (1) Product and Regulatory Insert

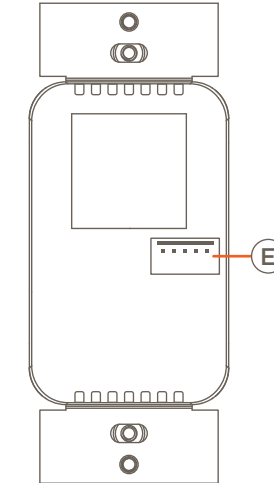
### Specifications

Environmental	
Temperature	32° to 104° F (0° to 40°C)
Humidity	10% to 90% (non-condensing)
Dimensions and Weights	
Height	4.13 in (10.50 cm)
Width	1.72 in (4.36 cm)
Depth	0.97 in (2.46 cm)
Weight	Shipping: 0.6 lbs (0.27 kg)
Power	
Input	24V DC 2A
Avg Power	0.5 Watts
Max Power	1.4 Watts
Regulatory	
Safety and Emissions	FCC Part 15B  CE Mark  C-Tick 
RoHS	Compliant
Minimum Support Requirements	
Savant OS	da Vinci 9.0

### Front View



### Rear View



- A Ambient Light Sensor** - Detects the level of ambient light in the room and adjusts the LED brightness on the front panel. The ambient light sensor operation is modified using RacePoint Blueprint®.
- B Dimming Level** - Six indicator LEDs track the brightness of the load. LEDs turn on from left to right as intensity on load increases and turns off from right to left as intensity decreases. Once configured in Blueprint, the LEDs track the brightness of the scene configured.
- C Reset Button** - The reset button has two functions:
  - Press and release the reset button will reboot the keypad.
  - Press and hold the reset button for five seconds will Factory reset the keypad. This will erase the stored keypad address.
- D Buttons** - Up to six Buttons. With status LEDs on up to four buttons
- E Station Control Connection** - 5-Pin female port for the Cable Control Station Pigtail to be connected.

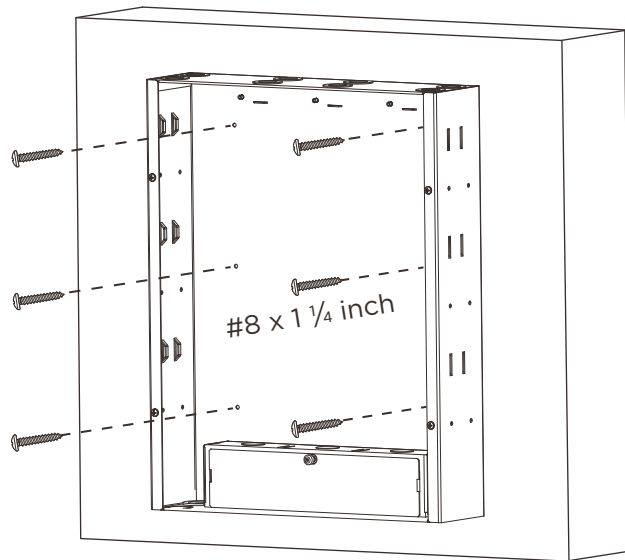
## 3. Installation

### 3.1. PWM-ENC3

Both surface and In-Wall mounting (between two studs) is available. Both methods are described below.

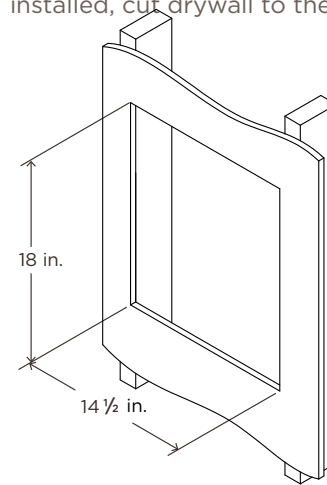
#### Surface Mount Instructions

1. Loosen the four hold down screws that secure the lid to the enclosure.
2. Push up on the lid and pull away from the enclosure. Set lid aside.
3. Place the panel on wall where it will be mounted and make a mark on the wall for each of the mounting holes in the enclosure. Refer to image below.
4. Drill a starter hole for each screw location. Secure the enclosure to wall using (6) #8 x 1 ¼ inch self tapping screws into a solid sub wall. If the surface the panel is being mounted to is drywall with no solid surface behind it, sturdy wall anchors that can hold a minimum of 50 lbs ( 22.7 kg) is sufficient.
5. Screw the panel to the wall and ensure it is securely mounted.



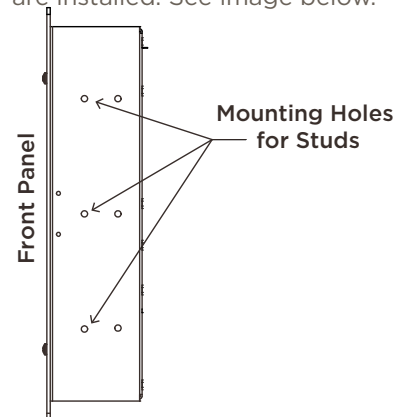
#### In-Wall Mount Instructions

1. Loosen the four hold down screws that secure the lid to the enclosure.
2. Push up on the lid and pull away from the enclosure. Set lid aside.
3. Locate two adjacent studs that are 16-inch on center. If there is drywall installed, cut drywall to the dimensions shown in image.



WALL CUTOUT

4. Secure the keypad power panel enclosure between the studs using appropriately sized #6 self tapping screws. Screw to studs using the three holes positioned toward the front of the panel. Using the holes closest to front panel allows access to the screws when the three keypad modules are installed. See image below.



## 3.2. SKL-3040

### Connecting Power

**⚡ ELECTRIC SHOCK!** The 120/240V AC source power poses an electrical shock hazard that has the potential to cause serious injury to installers and end users.

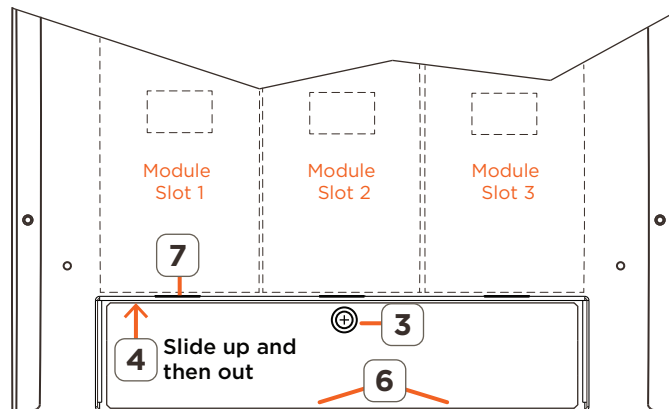
**⚠ IMPORTANT!**

- A licensed electrician is required to make AC electrical connections to the keypad modules. Isolate and turn off power at the main breaker panel prior to installing any electrical devices.
- For supply, neutral, and ground connections, use only #14 AWG or larger solid copper wire.

### Prepping Enclosure

Refer to the diagram just below these instruction for reference

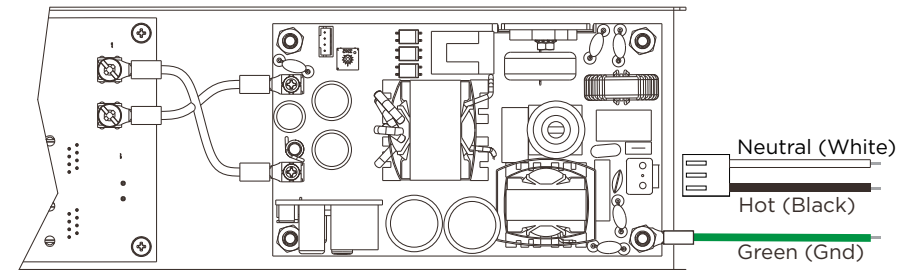
1. Remove power at the circuit breaker.
2. Remove the lid from enclosure if one is installed.
3. Turn the captive screw on the AC compartment panel counterclockwise (CCW) until the screw pops up.
4. Slide the cover up and out away from the enclosure. Put aside.
5. Remove the two WAGO 6 position push connectors that were shipped in the AC compartment and set aside.
6. Remove one of the electrical knockouts at the bottom of the enclosure and install a 1/2 inch electrical cable clamp.
7. Remove electrical knockout from module slot 1 and install 1/2 inch nylon insulating bushing. If installing more than one module, repeat for slots 2 and 3 as needed.



### Keypad Module Installation

1. Remove the keypad module(s) and corresponding 120/240V AC cable(s) from shipping box.
2. Flip keypad module over so the power supply is accessible.
3. Plug the keypad module PS to 120/240V AC cable into the 2 pin connector located on the bottom edge of the power supply board. The connector is keyed to aid installation. See diagram below:

Keypad Module Power Supply

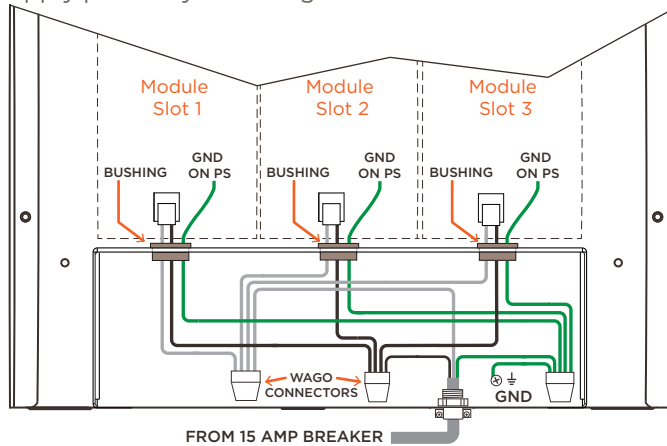


4. Position keypad module over the knockout removed during step 7 of **Prepping Enclosure**.
5. Insert the wires through the insulated bushing installed during step 7 of **Prepping Enclosure**.
6. Slide the tabs on the bottom of the keypad module into the slots to the left and right of the electrical knockout hole.
7. To hold the module in place before it is secured. Depress the top flange so the tab on the module seats behind the hook on the enclosure.
8. To secure keypad module to enclosure, turn the captive screw on top of module clockwise (CW).
9. Repeat steps 1 - 8 to install any additional keypad modules in slots 2 and 3 of enclosure.

## Making Connections

With all keypad modules installed, connect the white (neutral), black (hot), and green (ground) wires from each module to a 120/240V AC circuit. Use the diagram for reference.

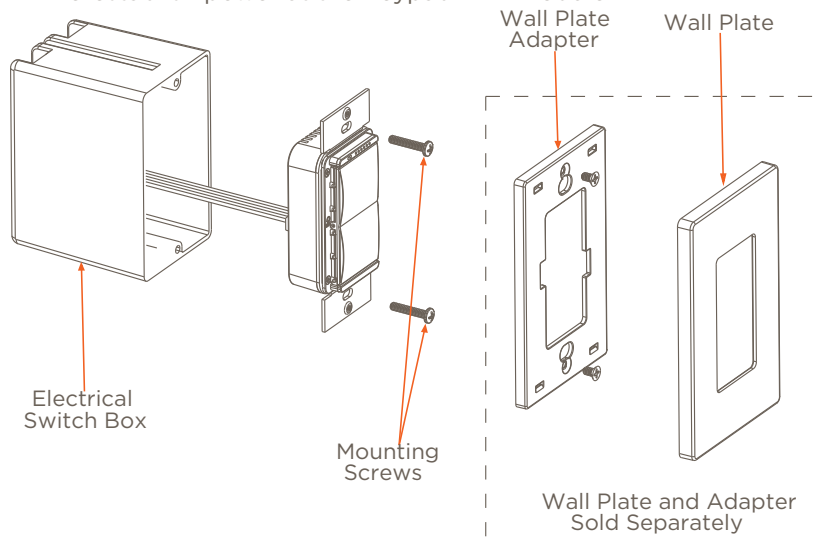
1. Verify the 120/240V AC feed from circuit breaker is off.
2. Strip approximately 10 inches of the outer jacketing from the electrical cable and insert wires through the electrical clamp installed in step 6 of the [Prepping Enclosure](#) section. Tighten clamp.
3. Using the 6-position WAGO connector mounted to the green ground wire screwed to the enclosure, connect all ground wires together.
4. Using one of the WAGO 6-position push connectors included with the enclosure, connect all the neutral wires together.
5. Using one of the WAGO 6-position push connectors supplied with the enclosure, connect all the hot wires together.
6. Insert all wires into the AC compartment, and reinstall AC compartment cover.
7. Apply power by switching the breaker at the circuit breaker box to the On position.



### 3.3. Keypads

All three Echo Low-Voltage keypad models install the same way.

1. Disconnect power from the Low Voltage Keypad Controller (SKL or Keypad Link).
2. Connect the wires to the Echo Keypad.
3. Insert the Echo Keypad into the electrical switch box and secure with the 6-32 flat head screws provided. DO NOT use a powered screw driver. A powered screw driver can over tighten the screws.
4. Re-establish power at the Keypad Link module.

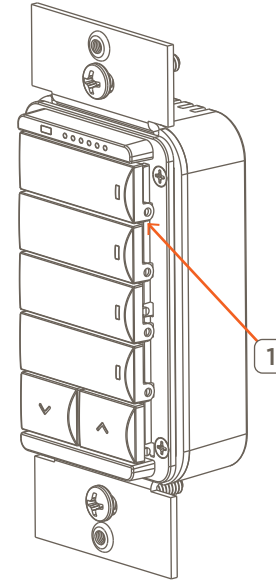


### 3.4. Changing Buttons

This section affects the Echo Configurable Keypads and Echo Dial keypads. The buttons have two hinge points for capture at the base. This hinge point allows for the button press feel. The same removal and installation process can be used across the single and double buttons.

#### Button Removal

1. Using a flathead screw driver apply light pressure outward on one of the hinge points. Place the screw driver between the hinge base and the plastic holder.



2. Once the button has been lifted off one hinge, the button can be pulled out. If not able to pull out easily, apply light outward pressure on the opposite hinge of the button.

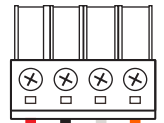
#### Button Installation

1. Place the button at an angle so that the hinge is captured by the holder. The button will sit at an angle off the keyframe.
2. Once the hinge is captured, apply light pressure and snap the button into place.

## 4. Wiring Keypads

This section covers wiring Echo Low-Voltage keypads to a Savant Keypad Link module.

### Keypad Link Module



+	Red	To keypad pin 1 (power)
-	Black	To keypad pin 2 (ground)
A+	White	To keypad pin 3
B-	Orange	To keypad pin 4

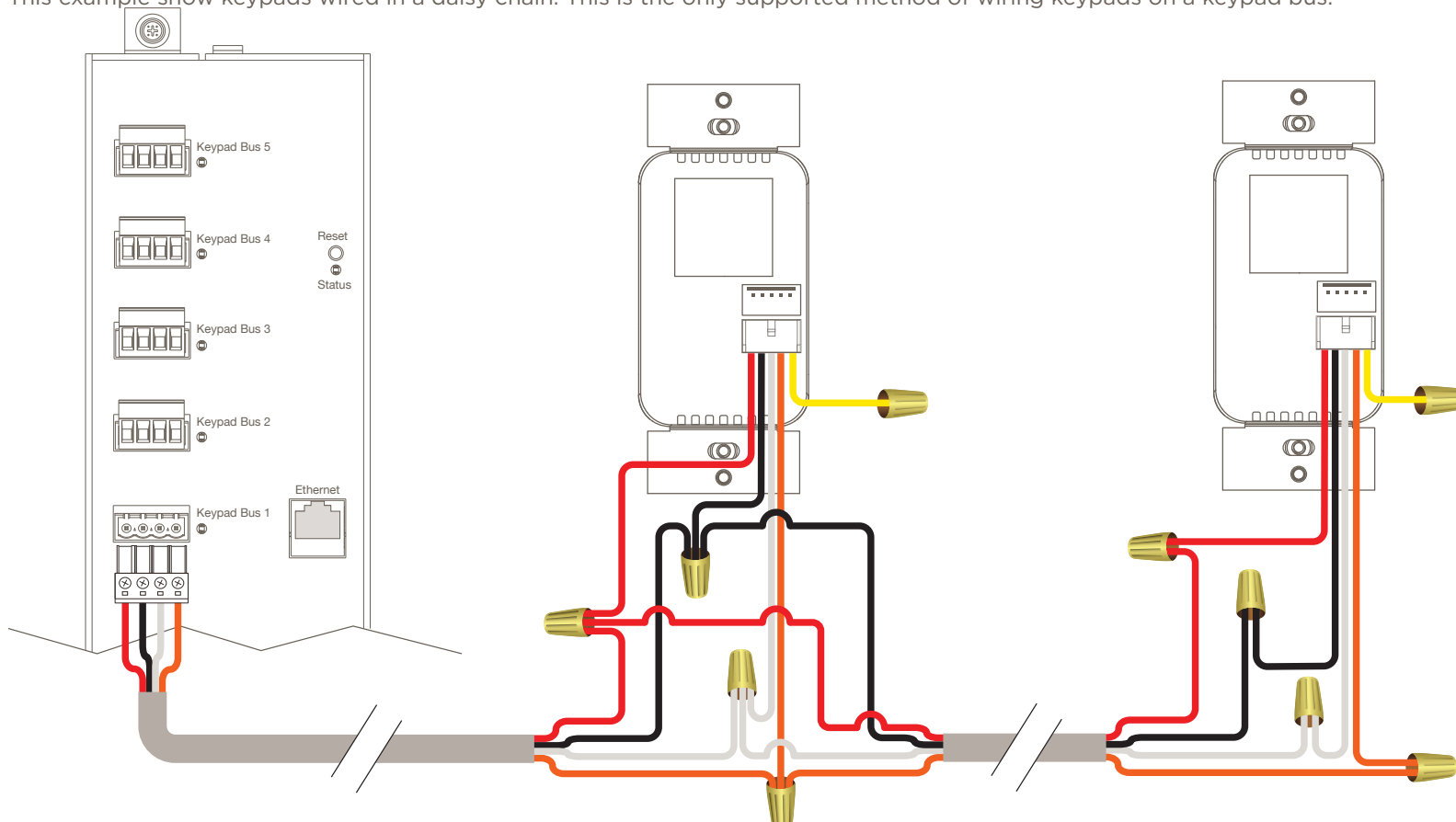
### Keypad



Red	24V DC input
Black	Power return
White	Data + (A+ on Keypad Link)
Orange	Data - (B- on Keypad Link)
Yellow	Contact Closure Control

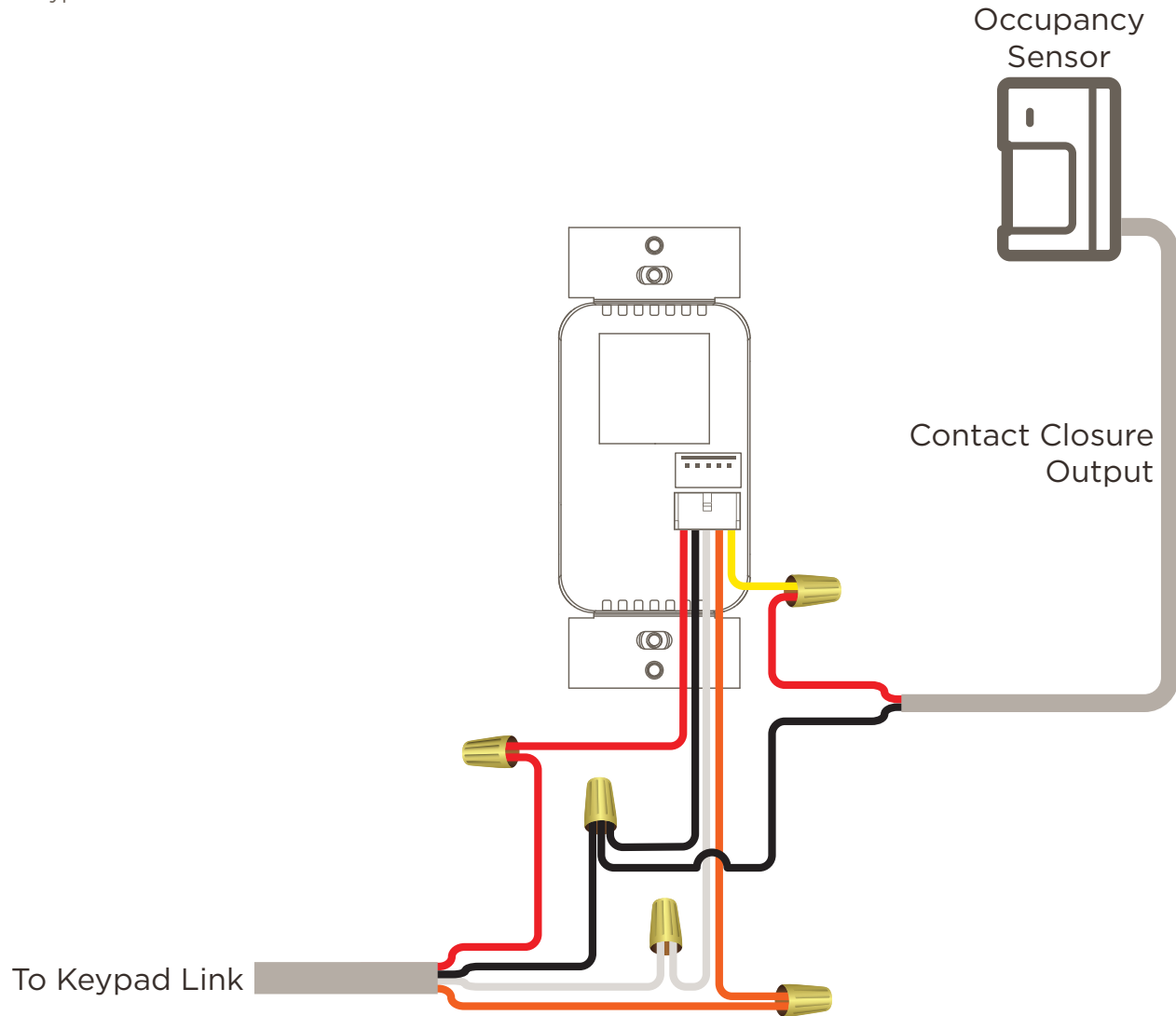
### 4.1. Wiring Example with Two Keypads

This example show keypads wired in a daisy chain. This is the only supported method of wiring keypads on a keypad bus.



## 4.2. Wiring Contact Closure Control

This diagram shows how to wire a contact closure device to a Echo Low-Voltage keypad the control of what this does is programmed in Blueprint like a keypad button.



**NOTE:** Contact Closure wire colors do not represent any standard.



## 5. Blueprint

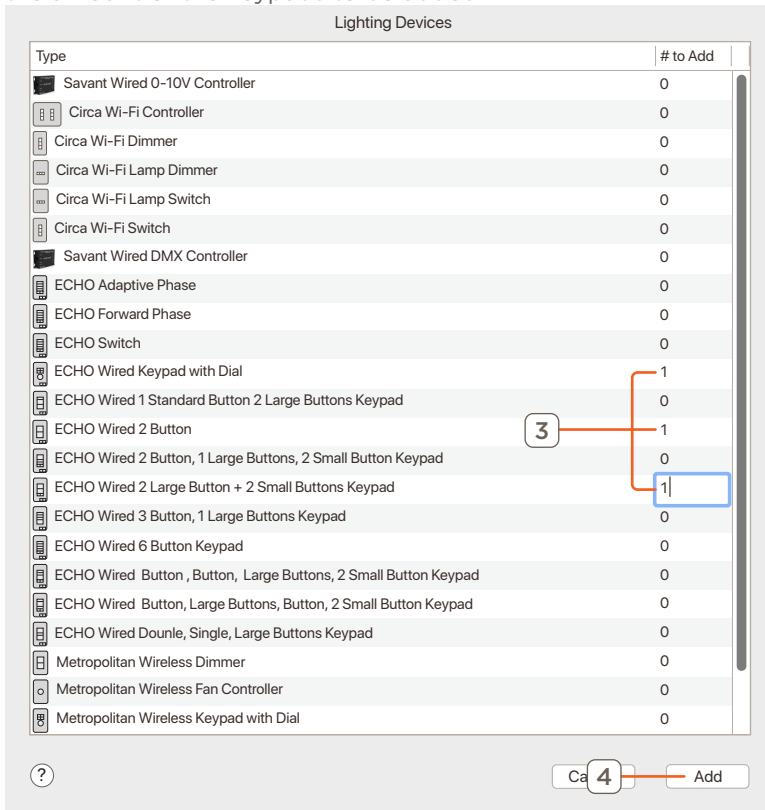
This section covers only the basic process of adding a lighting scene to a button in Blueprint for more detailed instructions on keypad programming see the [Savant Lighting and Keypad Programming Guide](#) on the [Savant Customer Community](#).

### 5.1. Adding Keypads to Configuration

This example will add one Wired Dial keypad, one Wired Configurable keypad, and one Wired Paddle keypad.

From an open Blueprint configuration do the following:

1. Open Lighting Manager.  
**Tools > Savant Lighting and Keypads**
2. Click + at the bottom left of the window.
3. In the pop-up window find the keypads to be added and enter the amount of the keypads to be added.



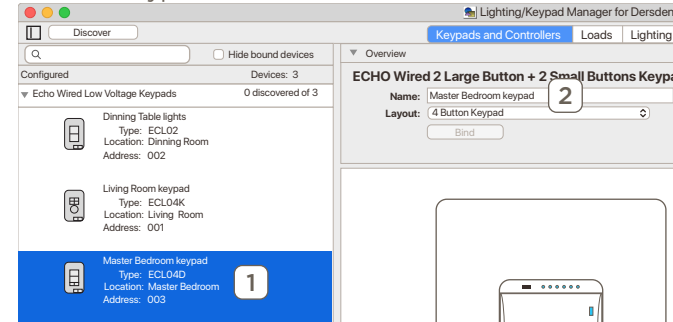
4. Click Add.

### 5.2. Configuring a Keypad

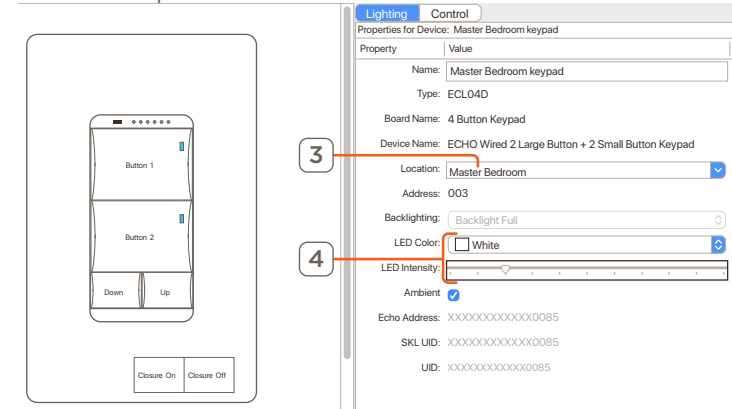
This section only covers the basic properties of a keypad, for more information about keypad programming see the [Savant Lighting and Keypad Programming Guide](#) on the [Savant Customer Community](#).

From an open configuration with keypads added and Lighting Manager open do the following:

1. Select a keypad.



2. Name the keypad as desired.
3. Use the drop-down menu to Select Location.



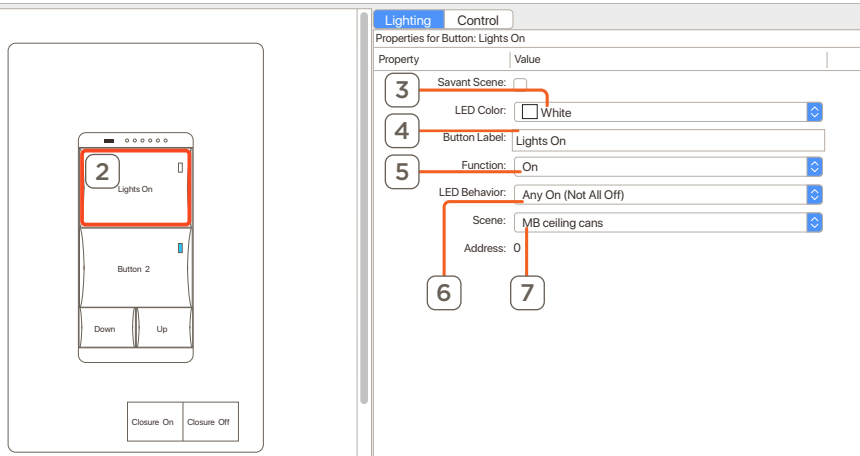
4. Change LED Color and LED Intensity as desired.  
**NOTE:** These changes will only affect the six dimming LEDs.

### 5.3. Programming a Button

This section only covers assigning a lighting scene to a button. For more detailed information of button programming see the **Savant Lighting and Keypad Programming Guide** on the **Savant Customer Community**.

From an open configuration with keypads added and Lighting Manager open do the following:

1. Select a keypad.
2. Select a button.

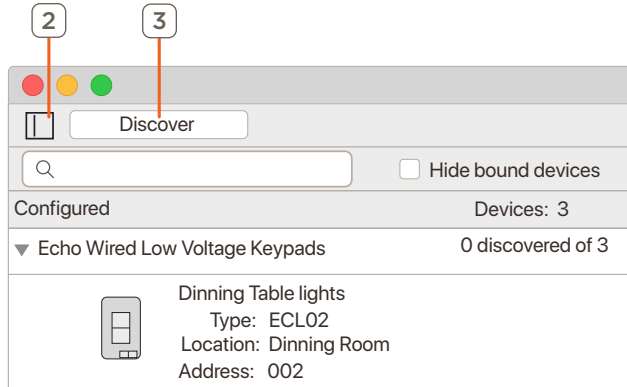


3. Select LED Color as desired.
4. Enter the Button Label.
5. Select the Buttons function.  
This example is to activate a lighting scene.
6. Change the LED Behavior if desired.
7. Select the Lighting Scene.

## 5.4. Binding Keypads

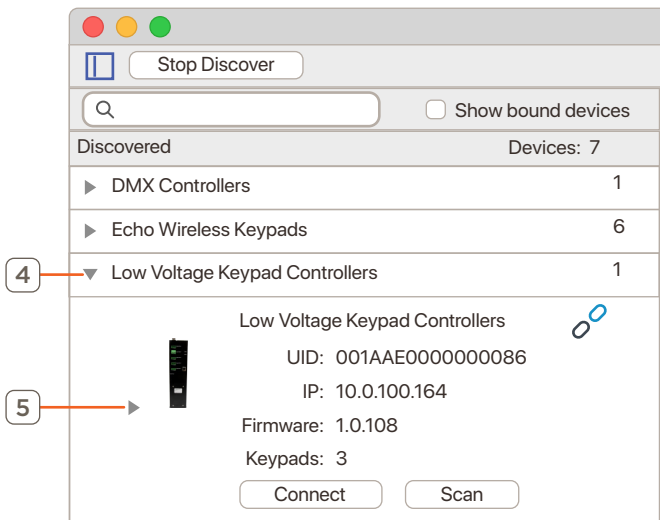
This section covers how to bind a Savant Echo Low-Voltage keypad using the Lighting Manager inside Blueprint. This to be completed within a Blueprint configuration that has all the keypads programmed, installed on-site, and the Keypad Link is connected to the network. Do the following from an open Blueprint configuration:

1. Open Lighting Manager.
2. Click the Show Discover Panel icon.



3. Click Discover.
4. Find the Low Voltage Keypad Controller (SKL or Keypad Link) that is going to have keypads bound. Click the disclosure triangle to show the keypad links.

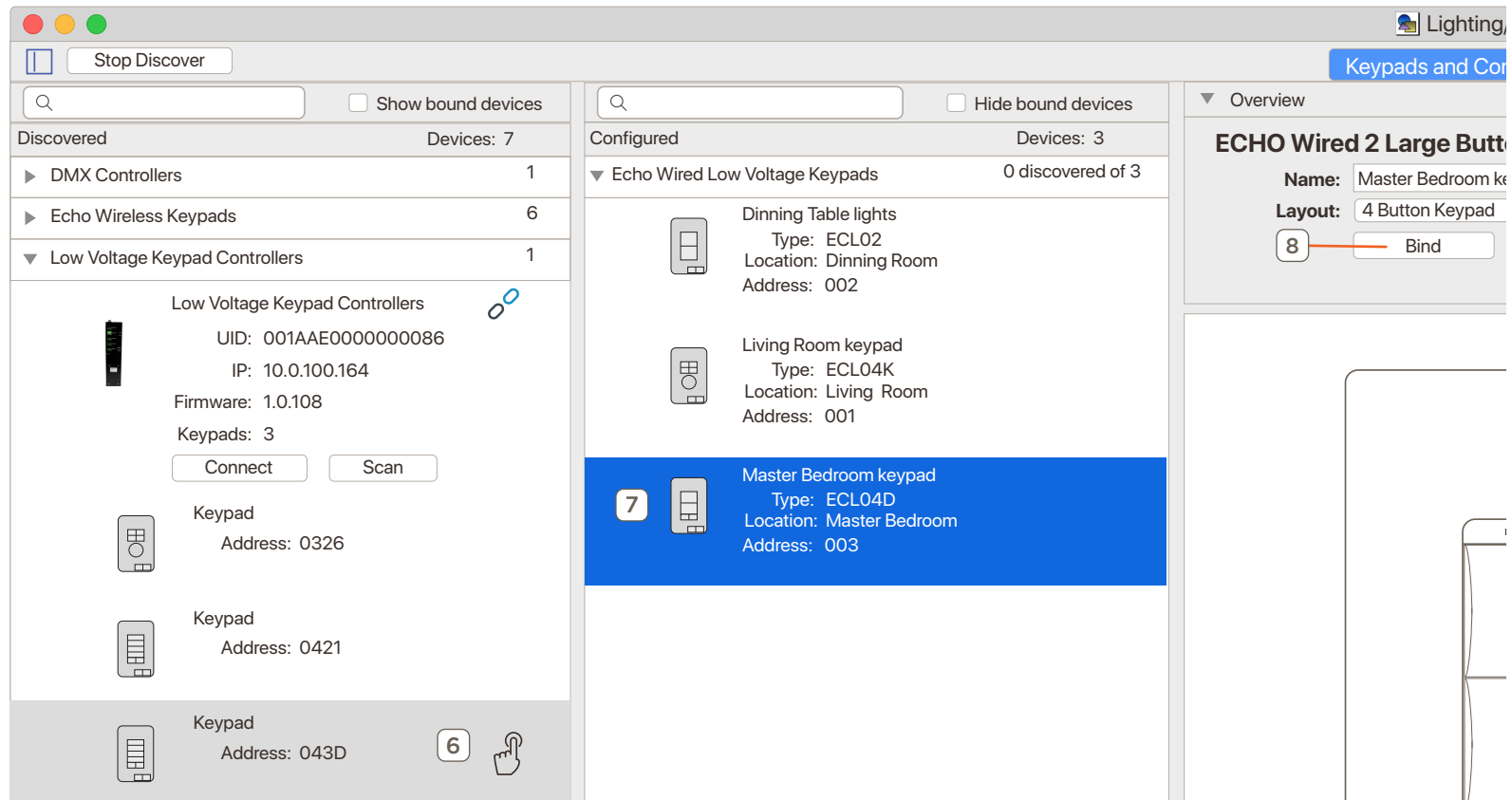
**⚠ IMPORTANT:** SKL-1010 controllers must have at least one keypad physically wired to the unit to obtain an IP address on the network and be discovered.



5. Click the disclosure triangle to show the attached keypads.

**⚠ IMPORTANT!** If the keypad link module has been reset or rebooted after the Discovery has occurred, press the Connect button to reestablish communications..

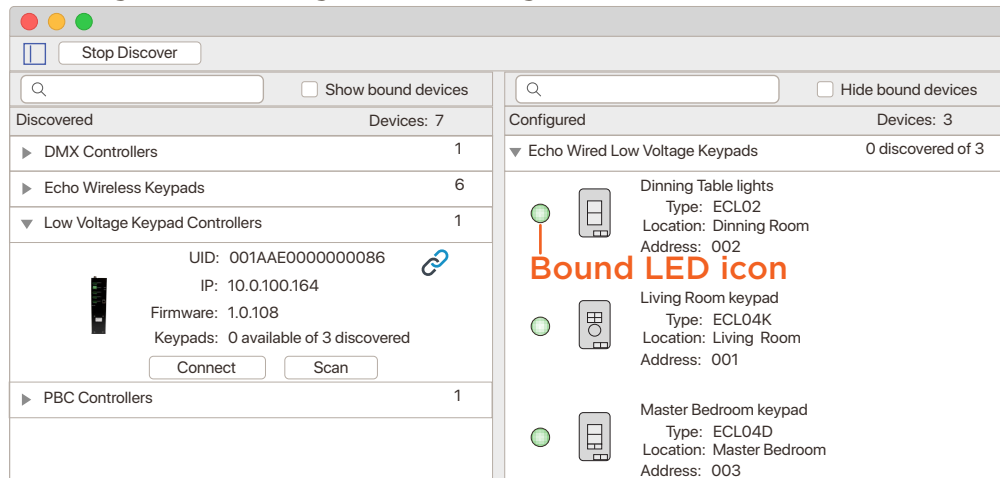
6. On the physical keypad that is to be bound press a button. In Lighting Manager  icon will appear on the keypad.






7. Select the Keypad in the Configured window.  
8. Click **Bind**.  
Once bound the keypad will move to the top of the window and have a Green LED icon to show its bound and discovered.  
9. Repeat for all keypads in the system.  
10. Click Stop Discovering.

## Appendix: Keypad Binding Indicator Information

This appendix gives information on Lighting Manager Binding LED icon. A keypad that is bound means that the UID of the keypad and the keypad link have been assigned in the configuration. The image below shows the icon. The table under the image has the information.



None	UID not assigned.
 Green	Bound and discovered.
 Yellow	Bound, but discovery has not yet been run.
 Red	Bound but not discovered after discovery completed.

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