## SAVANT

### ECHO and Metropolitan Style Low Voltage Keypads - Quick Reference Guide

#### Box Contents (WPB/WIB-xxLV02, WPK/WIK-xxLV05)

- (1) Keypad (faceplate not included)
- 5-pin Cable Control Station Pigtail (064-0456-xx)
- (1) Product Regulatory Statement (009-1950-xx)

#### Box Contents (WPB/WIB-xxLV06)

- (1) Keypad (faceplate not included)
- (1) 5-pin Cable Control Station Pigtail (064-0456-xx)
- (2) Double Height Keypad Buttons (074-0927-xx)
- Product Regulatory Statement (009-1950-xx)

#### **Specifications**

Environmental			
Temperature	32° to 104° F (0° to 40° C)		
Humidity	10% to 90% Relative Humidity (non-condensing)		
Location	Indoor Use Only		
Dimensions and Weights			

Dimensions and Weights					
	Length	Width	Depth	Weight	
WPB-xxLV02					
WPB-xxLV06	4.13 inch	1.72 inch	.97 inch	.30 lb.	
WIB-xxLV02	(10.50 cm)	(4.37 cm)	(2.46 cm)	(0.13 kg)	
WIB-xxLV06					
WPK-xxLV05	4.13 inch	1.72 inch	1.24 inch	.30 lb.	
WIK-xxLV05	(10.50 cm)	(4.37 cm)	(3.15 cm)	(0.13 kg)	
Shipping	7.0 inch (17.78 cm)	4.5 in. (11.43 cm)	3.0 in. (7.62 cm)	.60 lb. (0.27 kg)	



**HELPFUL!** The variation in the depth measurement for the WPK and WIK is due to the dial on the front face.

#### Installation Recommendations

Minimum Supported Release

da Vinci 9.0

Savant recommends as a minimum:

- An open-backed low voltage bracket installed on the interior walls and a closed-back electrical box on exterior walls.
- An installation depth of at least  $1\frac{1}{4}$  inches (3.2 cm)

- All installation depth of at least 1.74 inches (3.2 cm).					
Power					
Input	24V DC				
Average Power Consumption	0.5 watts				
Maximum Power Consumption	1.4 watts				
Regulatory					
	FCC Part 15 Class B	CE Mark			
Safety and Emissions	F©	Œ			
RoHS	Compliant				

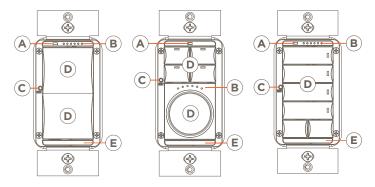
#### **Products**

Paddle Keypad (WPB-xxLV02-xx, WIB-xxLV02-xx)

Dial Keypad (WPK-xxLV05-xx, WIK-xxLV05-xx)

Configurable Keypad (WPB-xxLV06-xx, WIB-xxLV06-xx)

#### Front Panel



WPB-xxLV02 WIB-xxLV02 WPK-xxLV05 WIK-xxLV05

WPB-xxLV06 WIB-xxLV06



Ambient Light Sensor - Detects the ambient light level in the room and adjusts the brightness of the button and dimming LEDs. The ambient light sensor is enabled and disabled from the Lighting and Shade manager in Blueprint.

Dimming Level Indicators - The six status LEDs on the front panel can indicate any of the following:



- The amount of power applied to the load. The LEDs turn on from left to right as power is increased and switch off from right to left as power is decreased.
- The amount of power applied to the load for any scenes created in Blueprint or the Pro App.
- The status of the keypad during the setup and provisioning process. See the LED Sequencing section.

#### Reset Button



Press and release - Reboots the keypad.

Press and hold - Press and hold for 5 seconds, then release to perform a factory reset. A factory reset erases the keypad's stored address.



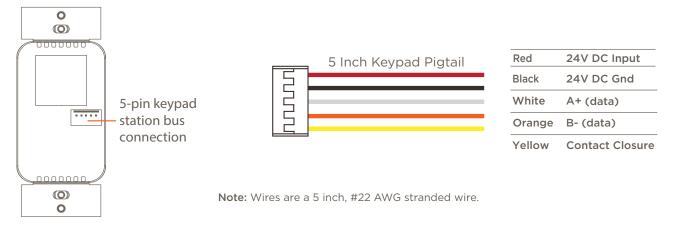
Buttons - Programmable buttons. See the Low Voltage Deployment Guide for instructions on how to program. This guide and other lighting information are available on the Keypad Lighting Documentation Portal in the Savant Customer Community.



Button LEDs - When configured and bound to a Savant system, the LED's state gets defined by the selection made in the **LED Behavior** and **LED Color** fields from within the Lighting and Shade Manager.

#### Rear Panel (All Echo and Metropolitan Style Low Voltage Keypads)

The keypad's rear includes a 5-pin keypad bus connection that accepts the supplied 5-inch keypad pigtail cable. The connector is keyed, so the cable can't be plugged backwards. Use wire-nuts or an approved alternative when making the connections. The SKL-3040 supports up to 10 keypads per keypad bus and a maximum of 40 keypads per controller. The SKL-1010 can control up to 10 keypads on its one keypad bus.



#### Removal and Installation

Whether installing a new keypad or replacing an existing one, refer to the instructions below.

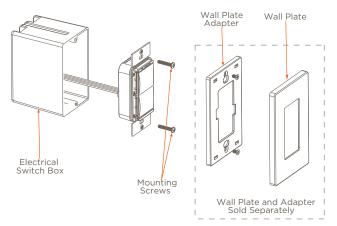


#### **IMPORTANT NOTES:**

- When working with electricity, even low voltage electricity, follow all standard electrical and safety precautions to avoid leaving exposed or bare wires that can short and cause damage to the equipment or yourself.
- Savant recommends a licensed electrician be used to make the electrical connections. When working with AC voltage, a licensed electrician is required.
- 1. At the main breaker panel, switch off the breaker that supplies power to the SKL-3040 or SKL-1010 Keypad Module.

NOTE: Skip steps 2-4 when this is a new installation.

- 2. Unscrew the wall plate to the existing keypad and remove it.
- 3. Unscrew the two 6-32 flat head screws and pull out the existing electrical switch/dimmer.
- 4. Disconnect and label each wire removed from the existing switch or dimmer. Label the wires to ensure they get installed onto the new keypad correctly.
- 5. Connect the in-wall wires to the supplied 5-inch keypad pigtail using an approved wire nut or a similar alternative. Refer to the Rear Panel section above when making connections.
- 6. Plug the pigtail wire into the rear of the keypad. The connector is keyed and can only be plugged one way.
- Insert the keypad into the electrical switch box and secure using the 6-32 flat head screws provided. DO NOT use a powered screwdriver. A powered screwdriver can over-tighten the screws.
- 8. Install the wall plate adapter using the screws supplied with the adapter.
- Switch on the breaker that supplies voltage to the SKL-3040 or SKL-1010. The keypad will go through a boot sequence, and both the button and dimming array LEDs will cycle red, green, blue, then white.
- 10. When the boot sequence completes, the six LEDs on the dimming array will begin to blink red in an alternating pattern. This pattern indicates the keypad controller is looking for keypads on each bus. Once discovered, the keypads will enter the next state. Refer to the LED Sequencing section for information on the various states.



11. Install the wall plate. The keypads are now ready to be programmed. Programming information is available in the Low Voltage Deployment and Programming Guide. This guide and more can be located in the Lighting Documentation Portal available on the Savant Community.

#### **LED Sequencing**



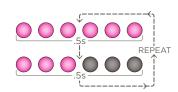
**HELPFUL INFORMATION!** During the setup process, or if the keypad is not functioning in a Savant system, the dimming LEDs are programmed to blink specific sequences to indicate the keypad's state. To find the keypad's state, press any button on the keypad, and the dimming LEDs will begin blinking one of the sequences shown below. The first three sequences shown will blink for about 30 seconds and then stop. Pressing any button after the blinking stops will restart the process. Once the keypad is connected to the keypad controller and communicating with the Host (functioning normally in a Savant system), the dimming LEDs track against the device the keypad is configured to control.

# Ss REPEAT

#### Three dimming LEDs alternate red left to right.

The keypad is not communicating with the keypad controller. This sequence typically happens during the discovery process (when the controller is looking for the keypads). If the LEDs continue to blink after the discovery process is complete, try each of the following to get the keypad to connect:

- 1. Verify there are no shorts or opens and the wiring between the keypad and the keypad controller is correct. Go to the next step if the wiring looks good.
- 2. Press and release the reset button on the SKL-3040/1010 to restart the discovery process. The discovery process must be run whenever a keypad is replaced or added to a keypad bus.

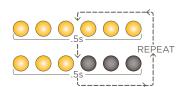


Three dimming LEDs on left are solid magenta and three dimming LEDs on the right blink magenta.

The keypad is wired and communicating with the keypad controller, but the controller is not uplinked to the Host.

up-link - Up-link refers to the following:

- The SKL controller and Host in the system begin communications.
- The SKL controller and lighting manager in Blueprint begin communications.

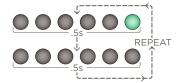


The three left dimming LEDs are solid yellow and three right dimming LEDs blink yellow.

The SKL controller and any keypads wired to that controller are connected and communicating with the lighting manager in Blueprint.

This state is also used during the Blueprint configuration process. In the lighting manager, when a user highlights one of the discovered keypads, the LEDs on the physical keypad begin to blink. The blinking LEDs let the user know which keypad in a room is the highlighted keypad.

More information on this sequence is described in the Low Voltage Keypad Deployment Guide. This guide and others can be located in the Lighting Documentation Portal on the Savant Community.



Rightmost dimming LED either blinks green or remains solid green.

The keypad has entered the boot-loader mode. The reason the keypad goes into boot-loader mode is during a firmware update.

#### Wiring Diagrams

Wiring diagrams are available in the Low Voltage Deployment Guide. This guide and others can be located in the Lighting Documentation Portal on the Savant Community.