

For Your Information ...

Using HomeWorks Contact Closure Keypad With Other Manufacturers' Equipment

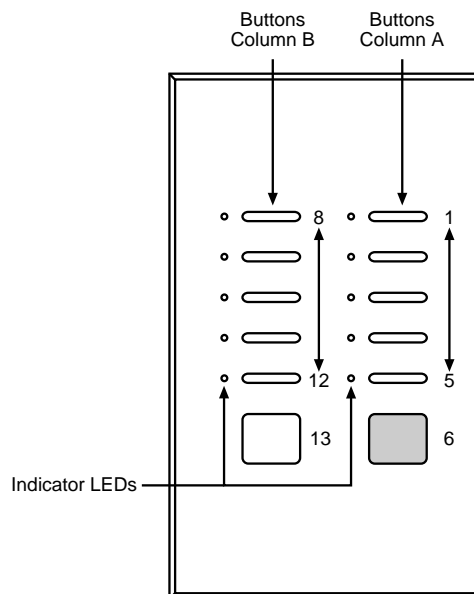
APPLICATION
NOTE

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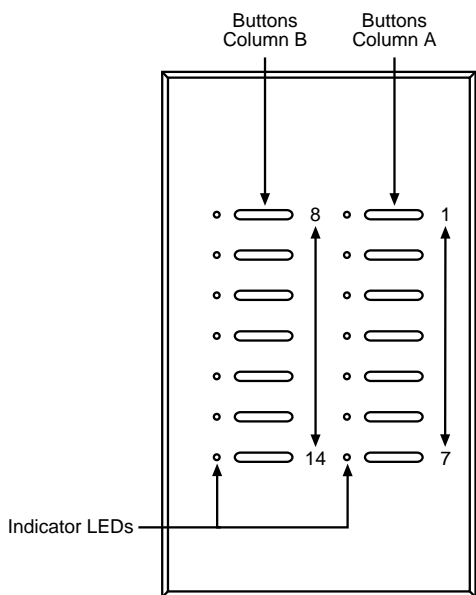
Overview

HomeWorks systems are often installed alongside other residential systems, such as whole-home audio or multi-zoned HVAC systems. Like HomeWorks, these systems provide keypad controls in many rooms of a house. In these situations, it is often desirable to provide a consistent keypad look to control all installed systems. The HomeWorks Contact Closure Keypads can be used for this purpose. They are designed to be directly wired to other manufacturers' equipment providing dry contact closure button inputs to other systems. The other manufacturers' equipment is also wired to directly drive the LEDs of the HomeWorks Contact Closure Keypads and provide the appropriate LED feedback.

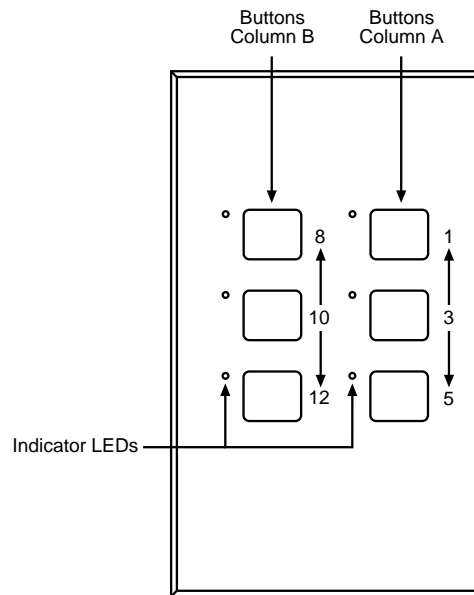
The keypads are available in three different button configurations as shown. These configurations can be customized by ordering them with certain buttons and/or LEDs deleted.



HWV-KPCC-M Keypad



HWV-KPCC-NM Keypad



HWV-KPCC-LB Keypad

Need additional assistance? Call the Lutron Hotline 1-800-523-9466

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Guidelines

- Two types of Contact Closure Keypads exist to support both common anode and common cathode LED configurations.

Common anode configuration corresponds to the following:

- When LED input is driven low (0V), LED is ON.
- When LED input is pulled high (+5V) or left open, LED is OFF.

In this case, LED common is tied to +5V (see Diagram A).

Common cathode configuration corresponds to the following:

- When LED input is pulled low (0V) or left open, LED is OFF.
- When LED input is driven high (+5V) LED is ON.

In this case, LED common is tied to 0V (see Diagram B).

The connected equipment should be able to source and sink 6 mA for each LED.

- The switches are rated for 12VDC, 50 mA resistive switching for Class 2 applications only. Switching higher voltages or currents may reduce the life of the switch. Do not use the switches for non-Class 2 applications. Switches are momentary, not maintained.
- Connect the keypad using either the connectors or the pigtailed provided. Refer to the diagrams below for the Wiring Schematic. The switches and LEDs are labeled on the printed circuit board on the back of each control (see Diagram C). Each switch (SW) and LED (LED) is identified by its column letter (A or B) and its number (1-14). The tool for attaching the wire connectors is made by AMP; the part numbers for the tool are 58246-1 (head assembly) and 58074-1 (handle assembly). One of each is required.
- Connect the ground wire to earth ground. This is the discharge path for the ESD protection wires.
- Check the equipment with which the Contact Closure Keypad will be interfaced to determine which LED configuration is required.

Wiring Schematic

Diagram A: Common Anode

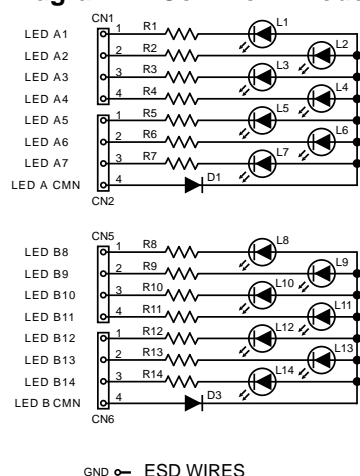


Diagram B: Common Cathode

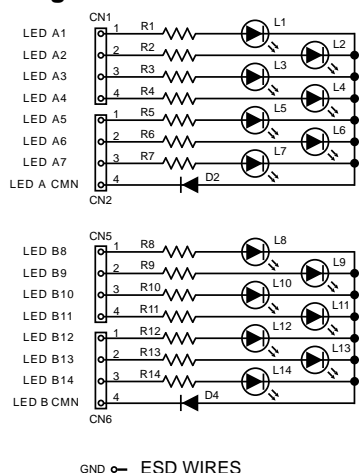
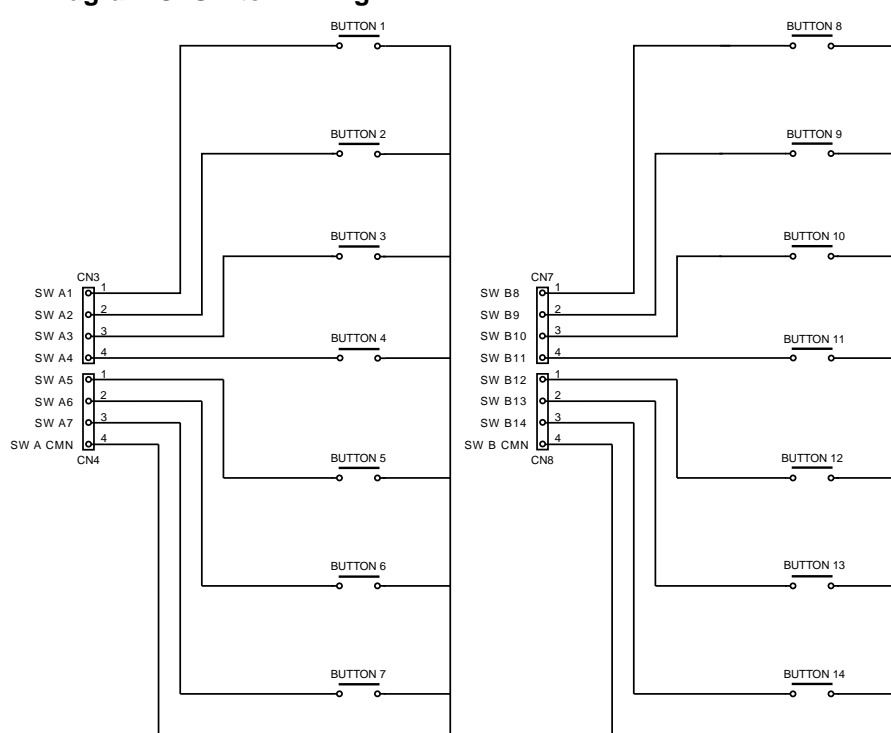


Diagram C: Switch Wiring



Worldwide Technical and Sales Assistance

If you have questions concerning the installation or operation of this product, call the **Lutron Technical Assistance Hotline**:

(800) 523-9466 (U.S.A., Canada, and the Caribbean),
other areas call (610) 282-3800
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