

# 830 Series

## Heavy Duty Keyswitches

## INSTALLATION INSTRUCTIONS

### Section 1

#### General Description

The 830 series SPST keyswitches are a reliable and economical way to turn on and off (830-A) or momentarily activate (830-B) automatic doors or other low voltage electrical devices.

#### Switch Operation Options:

**830-A:** Single Maintained Contact Switch

**830-B:** Single Momentary Contact Switch

**830-AA:** Double Maintained Contact Switches

**830-BB:** Double Momentary Contact Switches

**830-AB:** Single Maintained Contact and Single Momentary Contact Switches

**830-A-RG:** Single Maintained Contact Switch with Red and Green Indicator LEDs

**830-B-RG:** Single Momentary Contact Switch with Red and Green Indicator LEDs

In addition to the switch operation options, there are three face plate styles to choose from. Each option is also available with LED indicators. Add the suffix “-RG” to the part number to specify the LED option (830-A-RG). The RG option includes one Red and one Green LED, and one RCM Relay Conversion Module. Please refer to Figure 4 at the end of this manual for using the RCM.

The keyswitch assembly will fit in a variety of locations from a 1 $\frac{3}{4}$ ” door frame to a single, 2-gang, or junction electrical box. Surface mounting boxes are also available from the factory.

830-A or B: 4 $\frac{1}{2}$ ” x 4 $\frac{1}{2}$ ” stainless steel face plate (fits single, 2-gang, junction electrical boxes)

830-AL or BL: 2 $\frac{3}{4}$ ” x 4 $\frac{1}{2}$ ” stainless steel face plate (fits single gang electrical boxes)

830-AN or BN: 1 11/16” x 4 $\frac{1}{2}$ ” stainless steel face plate (fits 1 $\frac{3}{4}$ ” door frames)

### Section 2

#### Basic Installation

##### Single Gang Electrical Box: 830-A or B & 830-AL or BL

- 1) Install the electrical box (purchased separately) in its intended location.
- 2) Insert the mortise cylinder through the casting and attach it with the cylinder ring nut.



NOTICE: The keyswitch casting will accommodate mortised cylinder depths of 1 $\frac{1}{8}$ ” to 1 $\frac{1}{4}$ ” with standard cams. If using a different depth of cylinder, please ensure that it aligns properly with the push button switch(es).

- 3) Adjust the push button switch(es) so that it aligns directly beneath the cam of the key cylinder. Using a  $\frac{1}{2}$ ” wrench, loosen and tighten the panel nut that holds the switch(es) in place within the casting to allow movement forward or back.
- 4) Make the appropriate electrical connections to the wires connected to the switch(es) or LED indicators.
- 5) Secure the keyswitch assembly to the electrical box with the 6-32 x 1” screws provided and adjust assembly for squareness. Attach the face plate with the two tamper proof 6-32 screws provided.

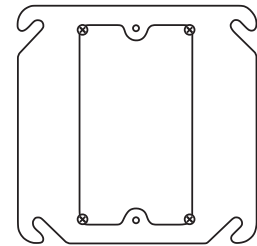
**MAX TORQUE 4 inch.-lbs. DO NOT OVER TIGHTEN!**



NOTICE: If the electrical box is mounted too deep in the wall, it may be necessary to shim out the keyswitch assembly in order to attach the face plate.

##### 2-Gang Electrical Box or Junction Box: 830-A or B

- 1) Install the electrical box (purchased separately) in its intended location.
- 2) Attach the adaptor ring provided (see below) to the electrical box.



- 3) Insert the mortise cylinder through the casting and attach it with the cylinder ring nut.



NOTICE: The keyswitch casting will accommodate mortised cylinder depths of 1 $\frac{1}{8}$ ” to 1 $\frac{1}{4}$ ” with standard cams. If using a different depth of cylinder, please ensure that it aligns properly with the push button switch(es).

- 4) Adjust the push button switch(es) so that it aligns directly beneath the cam of the key cylinder. Using a  $\frac{1}{2}$ ” wrench, loosen and tighten the panel nut that holds the switch(es) in place within the casting to allow movement forward or back.
- 5) Make the appropriate electrical connections to the wires connected to the switch(es) or LED indicators.
- 6) Secure the keyswitch assembly to the electrical box with the 6-32 x 1” screws provided and adjust assembly for squareness. Attach the face plate with the two tamper proof 6-32 screws provided.

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## Heavy Duty Keyswitches

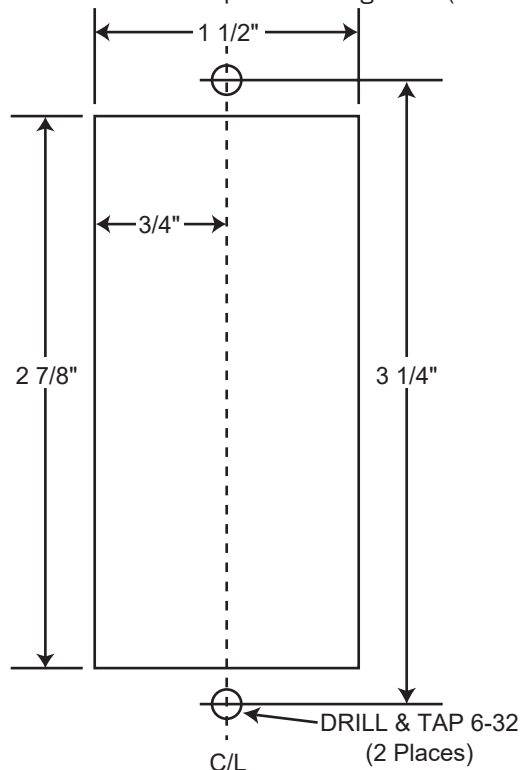
## INSTALLATION INSTRUCTIONS



NOTICE: If the electrical box is mounted too deep in the wall, it may be necessary to shim out the keyswitch assembly in order to attach the face plate.

### Door Frame: 830-AN or BN

- 1) Make a cutout in the door frame at the intended location. Drill and tap 2 mounting holes (see below).



- 2) Insert the mortise cylinder through the casting and attach it with the cylinder ring nut.



NOTICE: The keyswitch casting will accommodate mortised cylinder depths of 1 1/8" to 1 1/4" with standard cams. If using a different depth of cylinder, please ensure that it aligns properly with the push button switch(es).

- 3) Adjust the push button switch(es) so that it aligns directly beneath the cam of the key cylinder. Using a 1/2" wrench, loosen and tighten the panel nut that holds the switch(es) in place within the casting to allow movement forward or back.
- 4) Make the appropriate electrical connections to the wires connected to the switch(es) or LED indicators.
- 5) Secure the keyswitch assembly to the electrical box with the 6-32 x 1" screws provided and adjust assembly for squareness. Attach the face plate with

the two tamper proof 6-32 screws provided.

**MAX TORQUE 4 inch.-lbs. DO NOT OVER TIGHTEN!**

### Section 3

#### Technical Data

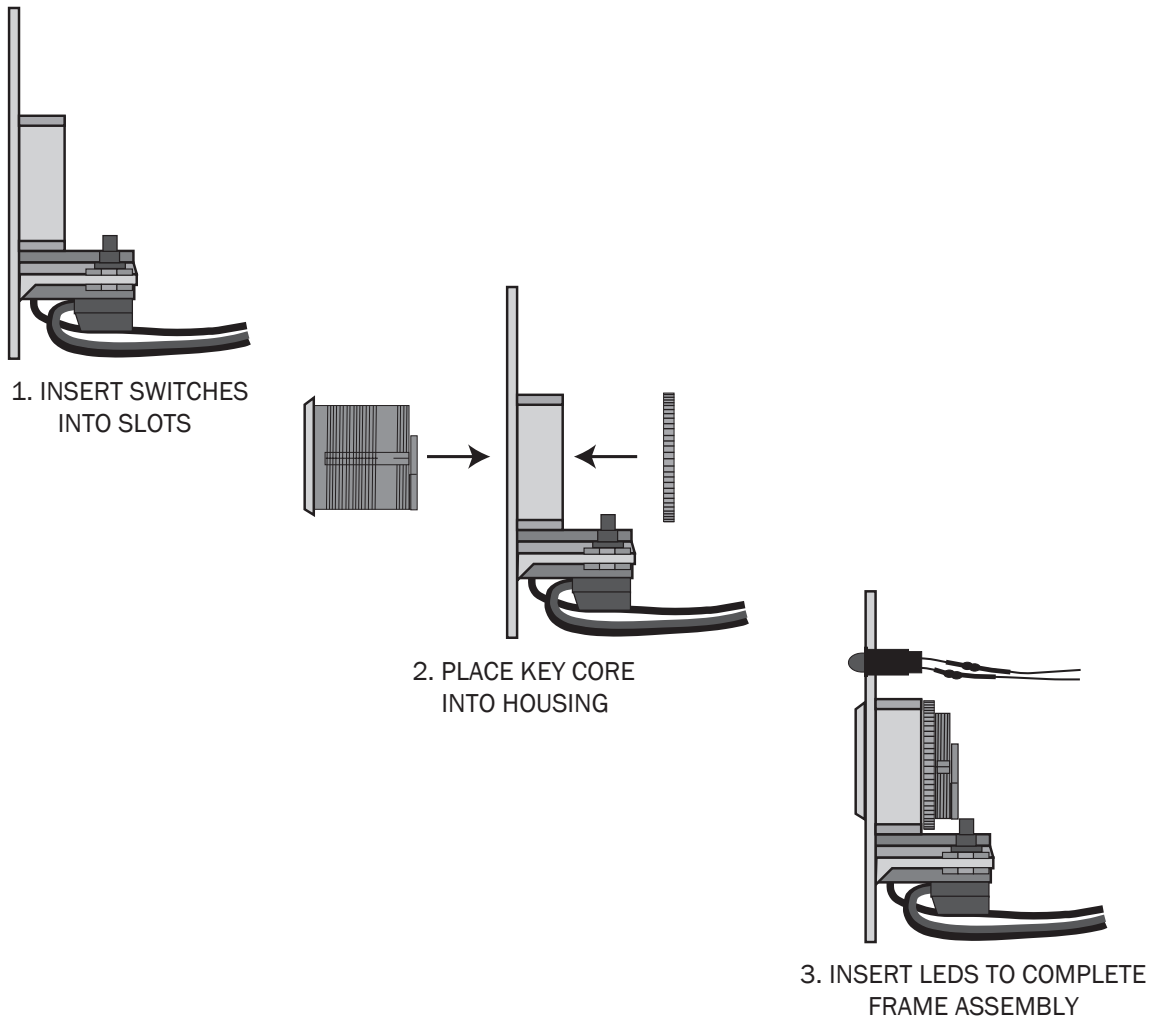
Momentary Push Button.....	UL Listed
Single Pull Single Throw (SPST)	
Rating.....	125V AC, 3A
Maintained Push Button.....	UL Listed
Single Pull Single Throw (SPST)	
Rating.....	125V AC, 6A
LED Indicator Rating.....	12-24V AC or DC

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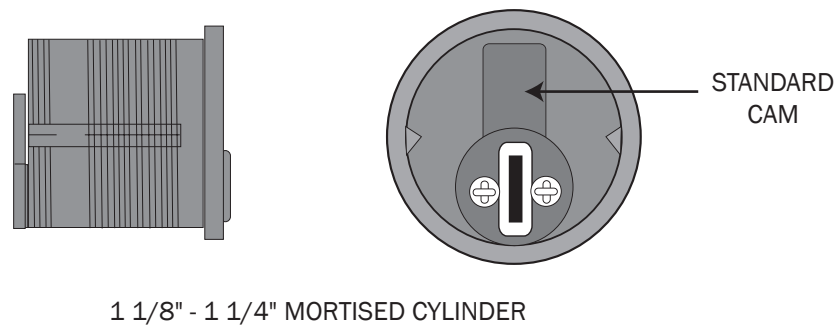
Heavy Duty Keyswitches

INSTALLATION INSTRUCTIONS

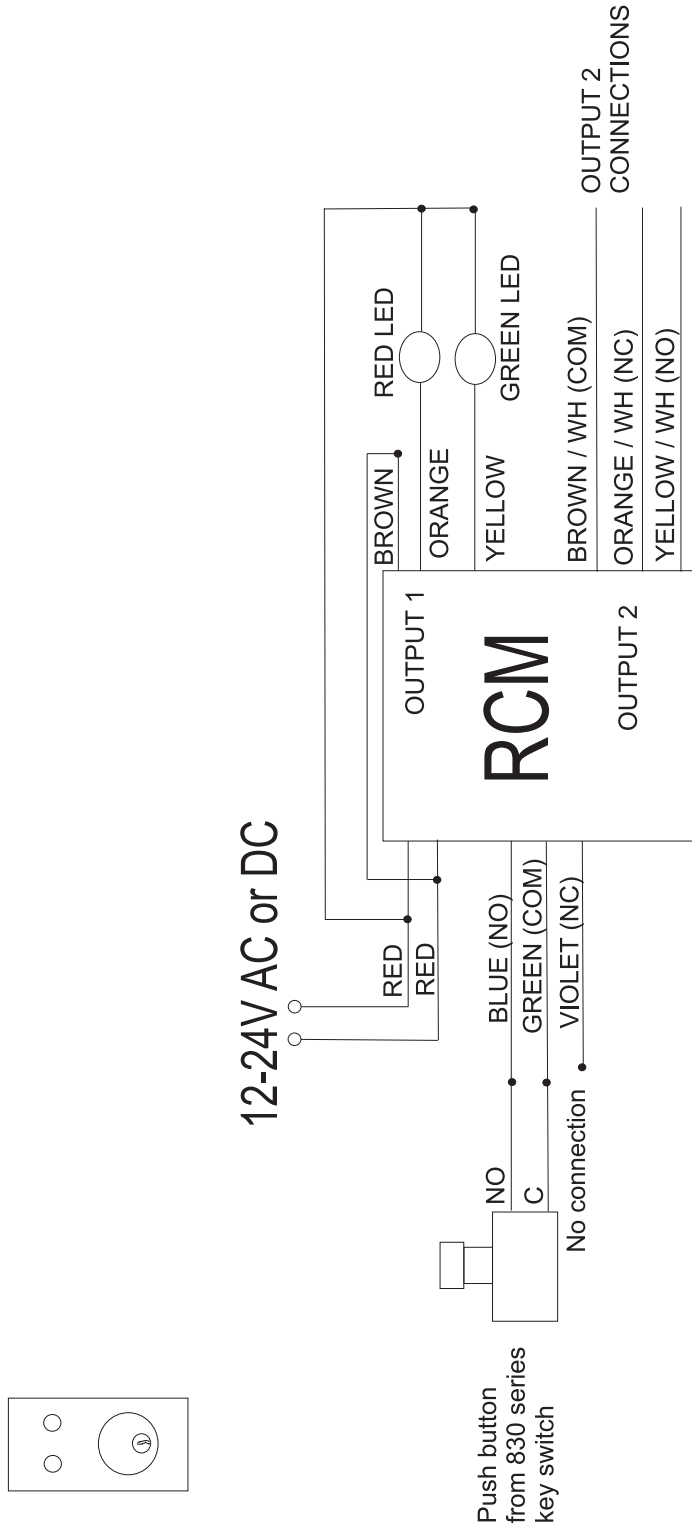
### FIGURE 1



### FIGURE 2



**FIGURE 3**  
Typical Wiring for RCM Module and 830 Series



**NOTES:**

When using the RCM with an 830-59J Combination switch, output 2 connections can be used to enable or disable the 59J actuator switch. Output 2 can also be used to perform other actions, such as turning power on or off for other devices.