

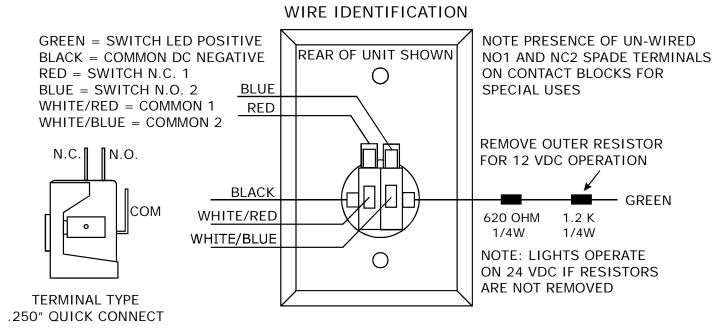
# SECURITRON PB5 EXIT BUTTON INSTALLATION AND OPERATING INSTRUCTIONS

### 1. DESCRIPTION

The model PB5 is a spring loaded momentary 2" diameter, illuminated exit button, mounted on a stainless steel single gang outlet box cover. The DPST contacts switch when the button is depressed and return when it is released. The contacts are UL listed with 5 AMP capacity. The PB5 can be used for momentary release of fail safe or fail secure electric locks. It may also be used to input a REX (request to exit) signal to a card reader system for release of an electric lock. We recommend that the local building or fire safety authority be consulted prior to using exit buttons for door egress. They may require a "no special knowledge" exit device such as Securitron's Touch Sense Bar.

#### 2. INSTALLATION

The PB5 comes with a retro-fit wall mounting device and color coded hookup wires installed. If a wall box is used, be sure it is at least 2 1/2" deep to accommodate the switch. The drawing below identifies the unit's connection points.



# 3. LED OPERATION

Resistors are installed so that the LED may be operated on either 12 or 24 VDC. The green wire that drives the switch LED has resistors soldered on it. If the power supply is 24 VDC, connect directly to the wire. If the power supply is 12 VDC, remove the outer resistor for proper operation at the lower voltage.

The switch LED draws 9 mA @ 12VDC or 20 mA @ 24VDC. For replacement: the switch LED is Securitron part number 030-14600. The switch LED is replaced by grasping the back of the white contact block and twisting it counter-clockwise to the 11 o'clock position, then pull the contact block straight out of the rear of the switch. This reveals the LED which then can be pulled out from the block. Insert new LED into contacts, the  $\oplus$  marking on the LED should be on the same side as the green wire with printing facing the same directions as the switch block terminals. Operating Life of the switch LED is 100,000 hours.

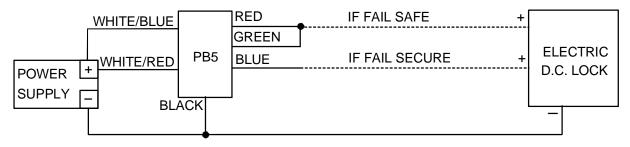
For LED replacement in older PB5: The switch LED assembly is replaced by snapping out the contact block assembly at the rear of the switch. Remove the PCB and replace with LED following the steps above.

#### 4. WIRING

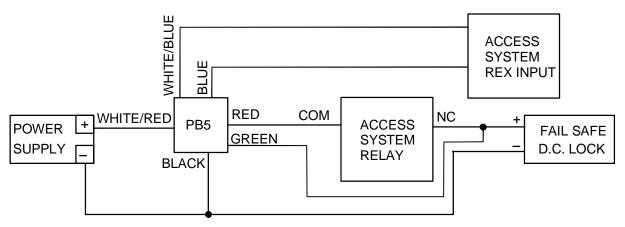
The drawings below show two common applications. The first shows momentary release of a fail safe or fail secure electric lock. The PB5 indicator is connected so that the switch LED is normally on (which helps guide a person to the push button). When the button is pressed, releasing the lock, the switch LED turns off. The second drawing shows interface of the PB5 with an access control system such that a fail safe lock (generally a magnetic lock) is released for the amount of time programmed into the system in safe, double break fashion. This application uses both poles of the PB5. The NC contacts of the PB5 are connected in series with the NC contacts of the access control system's lock control relay and the NO contacts of the PB5E connect to the REX input terminals of the access control system such that when the button is pressed, the access control system will operate its relay thereby releasing the lock and allowing egress. But if the access control system experiences an electronic failure, the PB5E contacts will still directly release the fail safe lock for as long as the button is held pressed.

Note: for special applications, unwired contacts NO1 and NC2 can be connected for full DPDT switch operation. You will see the unwired spade terminals on each contact block.

# MOMENTARY RELEASE OF FAIL SAFE OR FAIL SECURE ELECTRIC LOCK



## TIMED DOUBLE BREAK: FAIL SAFE LOCK USED WITH ACCESS SYSTEM



## 4. ALTERNATE LENS CHANGING

The pushbutton is factory shipped with the red lens set installed and two lens/insert options. Changing to the other lens sets is simple.

- 1) Grasp keyplate and turn over. From the back rotate the white contact block of the switch counter-clockwise to the 11 o'clock position and pull straight back to remove the contact block.
- 2) With a slender smooth ended object such as a marker pen, slide it inside the switch body. With the object inserted in the switch up against the lens, place the object on a smooth surface with the keyplate on top, and tap the keyplate up and down on the object to pop the lens off. Remove the lens and insert.
- 3) Turn the keyplate over and place the new insert onto front of switch, confirm that the text on the insert is correct reading to the keyplate and place the matching colour lens on top of the insert and compress around all edges of the lens until it snaps in place. Depress lens several more times to ensure smooth operation and that the lens is not binding.
- 4) With the terminals upward insert the contact block back into the back of the switch at the 11 o'clock position and rotate clockwise until it stops straight up and down.

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