

# ASSA ABLOY

# SECURITRON PB4L SERIES EXIT BUTTON INSTALLATION AND OPERATING INSTRUCTIONS

# 1. DESCRIPTION

The model PB4L series illuminated exit button is an all steel unit specially designed to resist vandalism. The button cannot be removed or tampered with from the outside. It is designed to resist shocks such as hammer blows. A bi-color indicator LED is included. Part number PB4L calls out a momentary spring loaded DPDT button on a single gang stainless steel plate with 4 Amp rated contacts. Adding the suffix "N" identifies the same unit on a 1 3/4" wide narrow stile plate. Adding the suffix "A" changes the push button switch to alternate action (push on/push off).

The PB4L can be used for momentary release of fail safe or fail secure electric locks. If interfaced with a release hold timer, such as Securitron's TimeMate TM-9, it can provide for **timed release** of electric locks. It may also be used to input a REX (request to exit) signal to a card reader system. 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 PB4L series comes with a retrofit mounting device and color coded hookup wires installed. A choice of fasteners is also supplied. The installer may elect to use standard 6-32 slot screws or the 6-32 spanner head screws, which provide a degree of tamper proofing. The drawing below shows identification of the unit's connection points.



## 3. BI-COLOR LED OPERATION

The bicolor LED can illuminate red or green and has 3 wires attached to it: Red, Green and Black. Black is common DC negative. Red is the +VDC input to illuminate red. Green is the +VDC input to illuminate green. Note that the black wire has 2 resistors on it. If the resistors are left as they are, the LED will operate on 24 volts. For 12 volt operation, remove the outer resistor. With this set up, you can use either color for your indicator or even alternate red and green to show 2 different conditions. The LED's could be operated, for instance, from an SPDT switch to change colors. You cannot, however, drive both sides of the LED at the same time (the indicator would show orange) or the resistors will be overloaded. If you need to be able to drive both colors at the same time to display a third (orange) condition, remove both resistors on the black wire and connect individual resistors on the red and green wires. The values would be: 620 Ohms 1/2 watt for 12 volts and 1300 Ohms 1 watt for 24 volts.

#### 4. SWITCH LED OPERATION

The switch LED can illuminate green if desired. The black wire is common DC negative, green is +VDC. The pushbutton is set up from factory as 24VDC. Remove the outer resistor on green wire to obtain 12VDC operation

#### 5. WIRING

The PB4L can be used in many different ways but the drawings below show two common applications. The first shows momentary release of a fail safe or fail secure electric lock. The PB4L indicators are connected so that the green LED is normally on. When the button is pressed, releasing the lock, the green LED turns off and the red one comes on. The second drawing shows timed release of a fail safe electric lock using the PB4L and Securitron's TimeMate. Momentarily pressing the button will release the lock for the amount of time set on the TimeMate. The indicator will switch from green to red during the lock release period. The wiring is also done in double break fashion so that even if the timer fails, the button will still be able to momentarily release the lock. This is for added safety.

MOMENTARY RELEASE OF FAIL SAFE OR FAIL SECURE ELECTRIC LOCK



#### TIMED DOUBLE BREAK RELEASE OF FAIL SAFE LOCK

