

## SECURITRON EEB2, EEB3N EXIT BUTTON WITH INTEGRATED TIMER INSTALLATION AND OPERATING INSTRUCTIONS

### 1. DESCRIPTION

The model EEB2: 2" square, exit button, mounted on a S.S. single gang keyplate. The model EEB3N: rectangular exit button, mounted on a 1-3/4" S.S. narrow stile keyplate. The EEB2 and EEB3N have a **3 Amp** switching capacity and a timer set for 30 seconds. These units are **intended only for release of a magnetic lock** from the inside of a door. When the button is pressed, **the lock releases for 30 seconds**. If pressed again during the 30 second lock release period, the unit will **"retrigger"** starting a new 30 second lock release period. These buttons are specifically intended for installation on **access controlled egress doors** as described in the **BOCA** code. A motion detector, such as Securitron's model XMS, is the primary means of releasing a magnetic lock on the door. The button is employed as a backup means of releasing the lock in case of a problem with the motion detector. Note that the exact time will vary with temperature but it will not be less than 30 seconds.

### 2. INSTALLATION

The EEB2 comes with a mounting device. The EEB3N has no mounting device and is intended for direct mounting on a narrow stile aluminum door frame. The frame must be routed out sufficiently to accommodate the EEB3N components.

### 3. WIRING

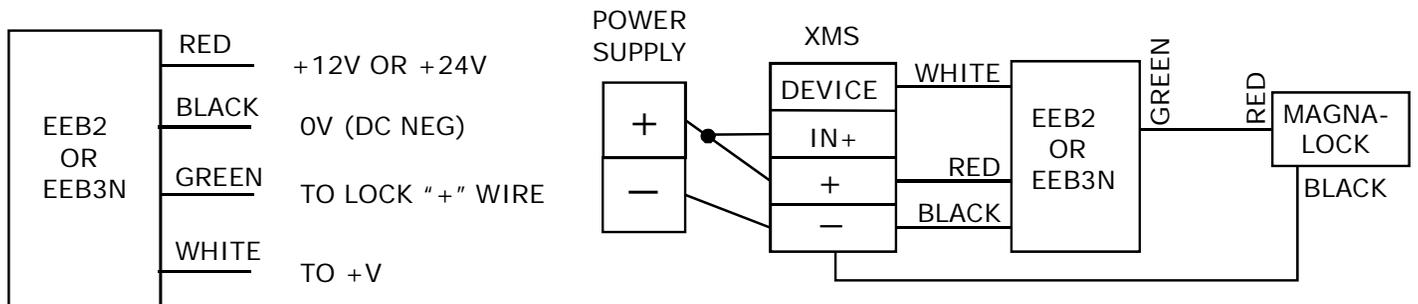
The unit will operate on 12VDC or 24VDC. Full wave rectified DC (transformer + bridge rectifier) is acceptable. It draws no current when at rest and 28mA @ 12V or 38mA @ 24V when releasing the lock. The black box that is affixed to the rear of the keyplate houses the timing electronics. Identify the hole in the side of the box with a plastic jumper block partly protruding from it.

**Factory shipped with jumper installed. Jumper in place = 12V. If removed = 24V. NOTE: If the unit is operated on 24V with the jumper in place, it can be damaged. The unit must operate on the same power supply that operates the magnetic lock.**

Four flying leads constitute the connection points for the unit. Two are for the application of constant power and two are for control of the magnetic lock. Figure 1 shows the color coded identification of the wires and a typical wiring diagram showing a power supply, motion detector, push button and Magnalock so as to comply with the BOCA code for access controlled egress doors.

**Note:** Both the push button contacts and the internal timer relay contacts are in series with the white and green wires. This **"double break"** wiring provides additional safety if for any reason, the timer electronics failed, pressing the button would still cut power to the lock for as long as the button is held in. **The white and green wires do not constitute dry NC contacts.** To operate properly, they must only be connected as shown in Figure 1: The white wire goes to a source of +V and the green wire goes to the positive input wire of a magnetic lock. Note that another switching device such as a motion detector can be put between the white wire and the source of +V (as is shown in Figure 1). Figure 2 shows the internal schematic of the push button contacts and timer which helps clarify the unusual wiring method needed to maintain double break safety.

**FIG 1: WIRE IDENTIFICATION AND TYPICAL HOOKUP**

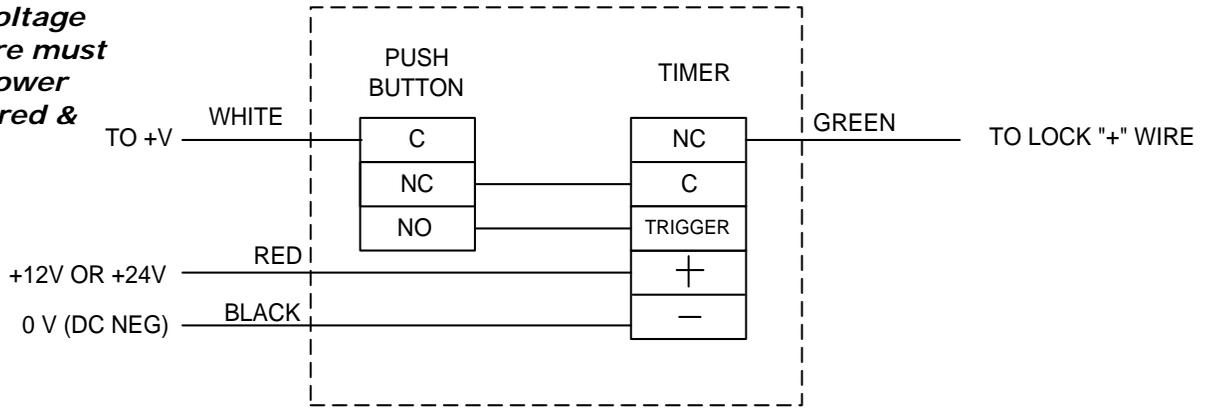


**NOTE:**  
**Positive input voltage on the white wire must be from same power source that the red & black wires are connected to.**

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**FIG 2: INTERNAL SCHEMATIC**



**4. ALTERNATE LENS CHANGING**

**EEB2**

- 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 on 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.

**EEB3N**

- 1) While holding keyplate grasp the top and bottom of the lens and pull straight out from the keyplate.
- 2) Place the new lens over the switch face, confirm that the text on the lens is right reading to the keyplate and push down completely until it snaps into place. Depress lens several time to ensure smooth operation and that the lens is not binding.

**5. MAGNACARE® LIFETIME REPLACEMENT WARRANTY**

For warranty information visit: [www.securitron.com/en/site/securitron/About/MagnaCare-Warranty/](http://www.securitron.com/en/site/securitron/About/MagnaCare-Warranty/)