



44487023

# PS902



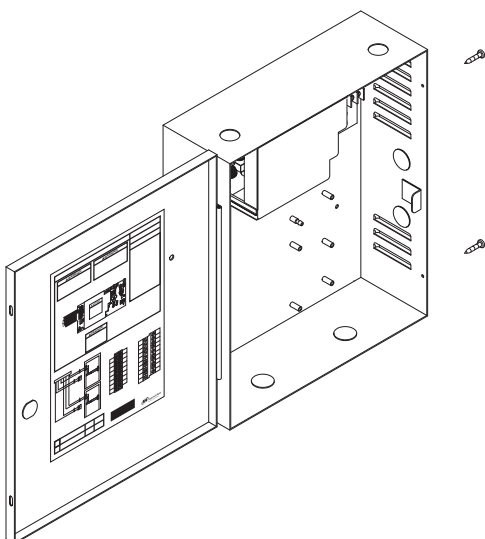
Power Supply

Installation Instructions

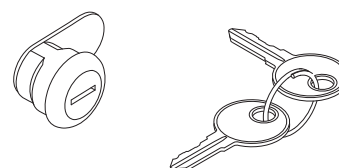


To avoid risk of electric shock, turn off AC power before installing or servicing PS902 power supply

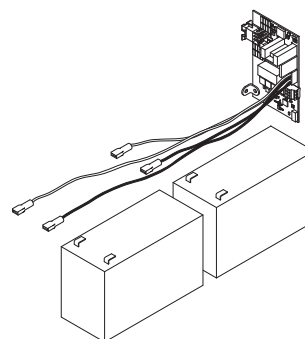
These instructions cover the following parts:



PS902 Power Supply - Pages 1-3



900-KL Keylock (optional) - Page 2



900-BB Battery Backup (optional) - Page 3

## PS902 Power Supply Specifications:

|  |   |  |
|--|---|--|
| Input  | 120/240 VAC, 1.1 A, 50/60Hz, High Voltage Class 1 Wiring Required |  |
| Output   | 2 Amp DC @ 12/24 VDC  |  |
| Enclosure  | 14" H x 12" W x 4" D (8 knockouts, 1/2" or 3/4" )                 |  |
| Temperature Range                                | 32°-120° F (0°- 49° C)  |  |
| Fuse   | F1, T3.15A<br>250VAC  | <div><div>⚠ CAUTION ⚠</div><div>For protection against risk of fire, replace fuse with same type and rating</div></div>  |
| Compliance                                       | UL 294, ULC-S318, RoHS, & FCC Part 15, Class 2 Output             |  |
| Compatible Boards<br>(Optional, 1 board maximum) | 900-2RS<br>900-2Q<br>900-4R<br>900-4RL<br>900-8F<br>900-8P        | INST. INSTRUCTIONS - 24125007<br>INST. INSTRUCTIONS - 44487098<br>INST. INSTRUCTIONS - 44487106<br>INST. INSTRUCTIONS - 44487080<br>INST. INSTRUCTIONS - 44487106<br>INST. INSTRUCTIONS - 44487106 |
| Fire Alarm Input Board (Optional)                | 900-FA  | INST. INSTRUCTIONS - 44487072  |
| Battery Backup Board (Optional)                  | 900-BB  | INST. INSTRUCTIONS - 44487064  |

## Mounting notes

The PS902 must be installed in accordance with the article 760 of the National Electrical Code or NFPA 72, Canadian Electrical Code, or any other applicable codes.

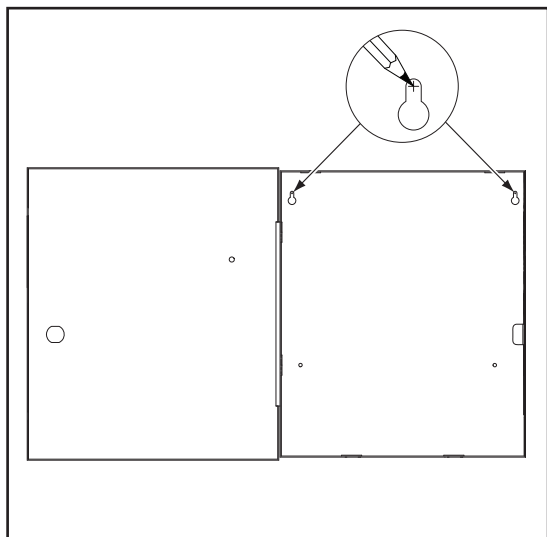
Install the PS902 indoors within the protected premises.

Check national and local codes for additional installation requirements.

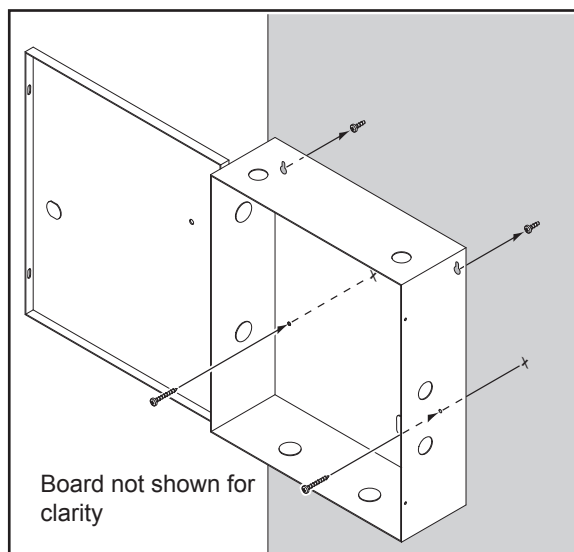
Enclosure must be firmly mounted to a solid surface using hardware suitable for the surface.

### 1 Mount power supply

#### 1a Mark 2 Top Holes



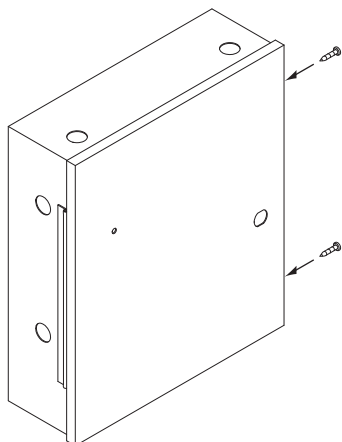
#### 1b Secure Enclosure with 4 Screws



### 2 Secure enclosure door

#### If No Keylock

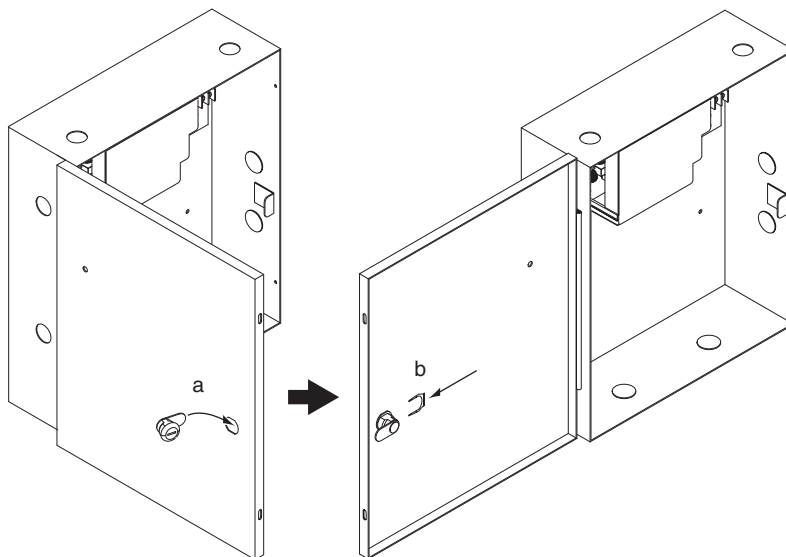
Enclosure will be secured with 2 screws as shown (done as last step)



OR

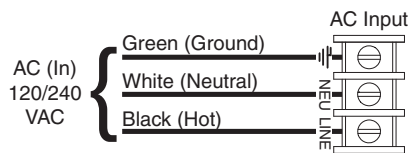
#### If Keylock

Remove knockout and insert key cylinder, then slide in clip

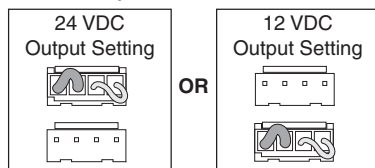


### 3 PS902 setup and testing

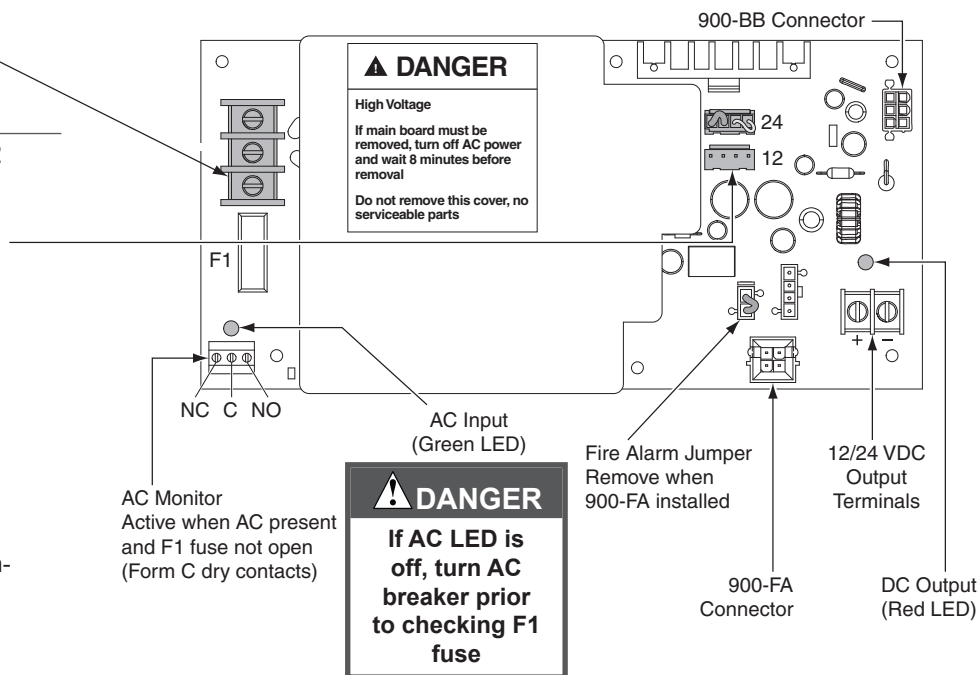
#### 3a Connect AC Wiring



#### 3b Use Jumper to Select 24 VDC or 12 VDC Output



Note: Minimum of 1/4" separation between AC and DC wiring as well as power limited and non-power limited.



### 4 Install 900-BB battery backup (If Included)

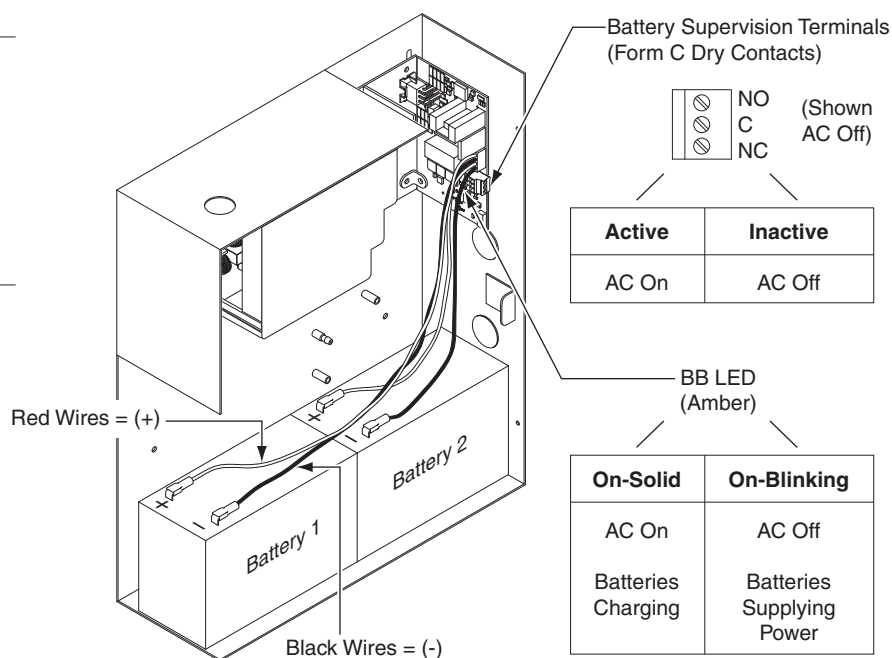
Refer to 900-BB instructions for additional info

#### 4a Place Batteries in Box with Terminals to the left

#### 4b Attach Wire from Battery Board

Red wires = (+)  
Black wire = (-)

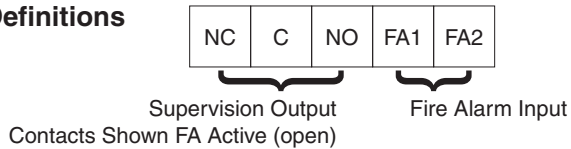
Note: allow 24 hours for batteries to fully charge



### 5 Turn on AC breaker to test power supply

- Verify AC LED is On = GREEN
- Verify DC LED is On = RED
- Verify BB LED (if applicable) is On = AMBER

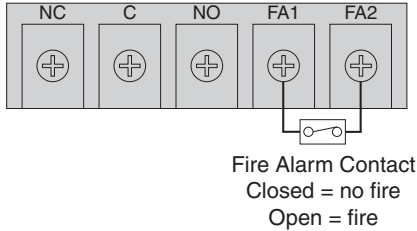
## Terminal Definitions



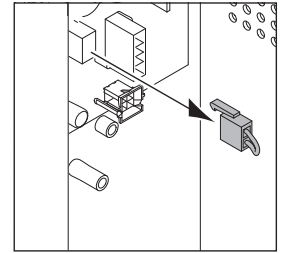
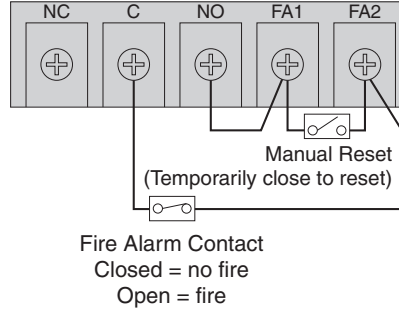
**Note:** If FA is installed on PS902:

- Verify jumper J13 is removed
- Power will be removed from PS902 when fire alarm is active

## One 900-FA Board - Automatic Reset

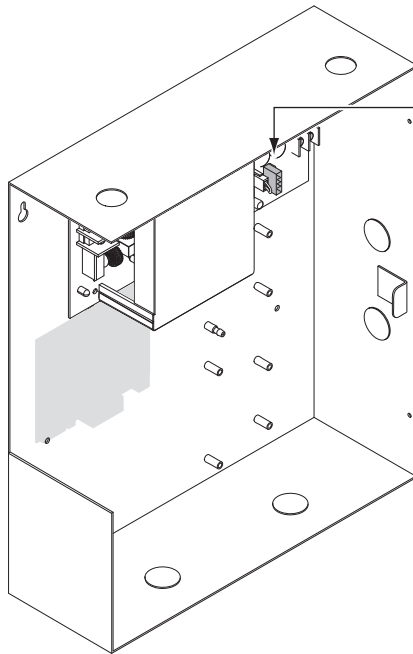


## One 900-FA Board - Manual Reset

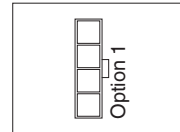


## Option Boards

Refer to appropriate instructions if any board shown below is factory-installed



### Option Board to be Plugged into Option Connector

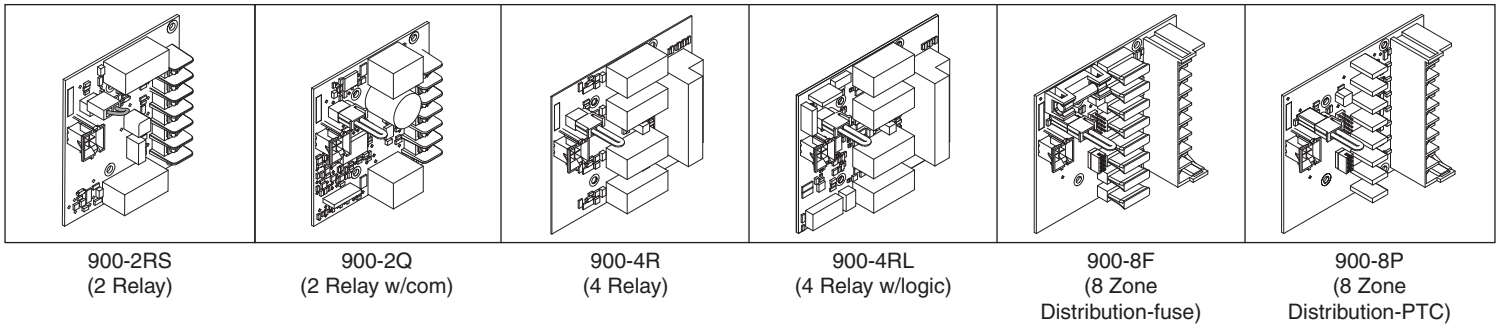


- See option board installation instructions for wiring info

### Notes:

1. When powering (2) QEL's with a PS902, both cannot be activated at the same time, they must be sequenced.
2. Latchbolt retraction of (2) sequenced QEL's requires more than 1 second to complete.
3. For double door QEL applications with auto operators, it is recommended to use a PS904, 906, or 914 power supply.

Available option boards:



**NOTE:** When installation is complete, secure enclosure door with screws (provided) or keylock

## Customer Service

1-877-671-7011 [www.allegion.com/us](http://www.allegion.com/us)





24125007

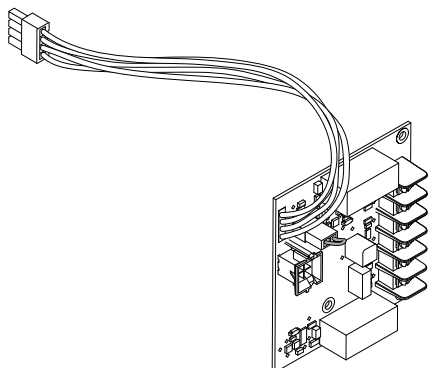
# 900-2RS



Option Board

Installation Instructions

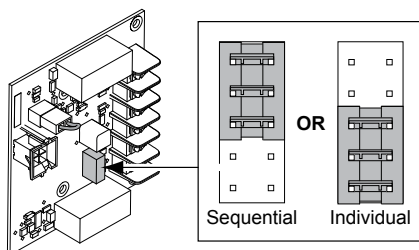
## 900-2RS Specifications:



|                   |   |
|-------------------|---|
| Inputs I1 , I2    | Dry contacts required (Closed = Active)<br>Connect control contacts between SC (Signal Common) and any input  |
| Outputs o1 , o2   | <ul style="list-style-type: none"><li>• 12/24VDC, 3A (wet) when AC powered</li><li>• 9.6-13.2VDC or 19.2-26.4VDC when battery powered</li><li>• May be used with PS914 to power EL device at 24VDC, 16A, 300ms</li><li>• Maximum load cannot exceed power supply ratings or 3A for outputs combined</li></ul> |
| Board Input Power | Board requires 0.1A max. of power supply output current to operate  |
| Temperature Range | 32°-120° F (0°- 49° C)  |
| Compliance        | UL 294, ULC-S318, RoHS, & FCC Part 15   |
| Fire Alarm Input  | Accepts 900-FA Fire Alarm Board (Optional)  |

## 1 INSTALL 900-2RS OPTION BOARD (IF REQUIRED)

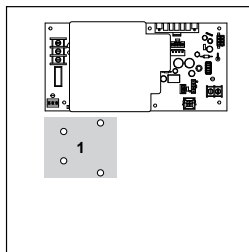
### 1a Use Jumper to Select Function



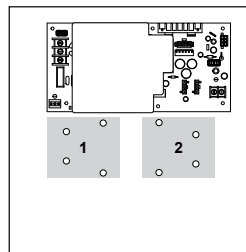
#### ⚠ DANGER:

Ensure AC breaker is turned off when installing or wiring option boards

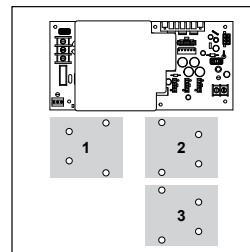
### 1b Review Available 900 series Option Board Mounting Locations (Gray)



PS902

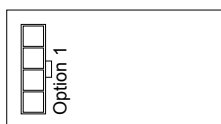


PS904  
PS914

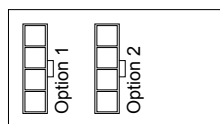


PS906

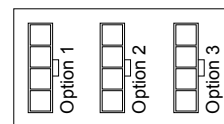
### 1c Plug 2RS Cable into any Available Option Connector



PS902  
1 Board



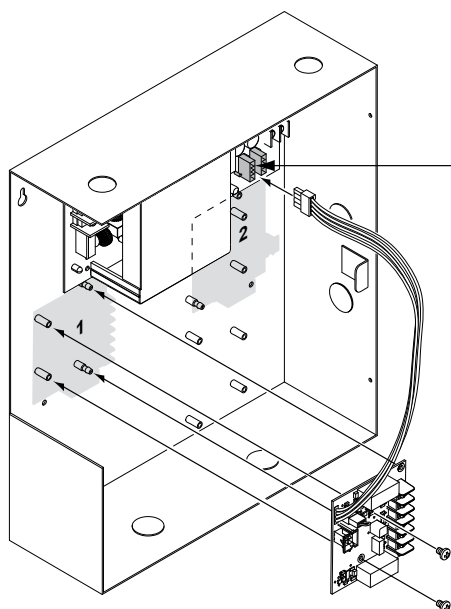
PS904, 914  
2 Boards



PS906  
3 Boards

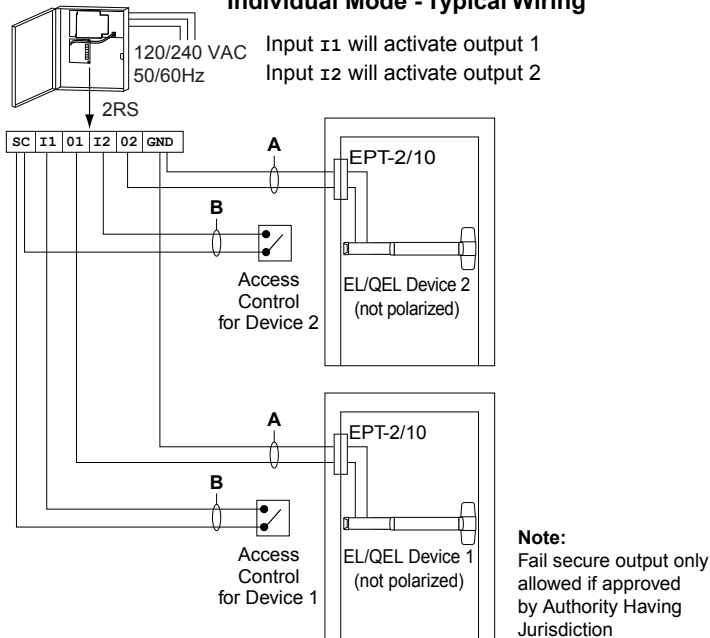
### 1d Secure Board with Screws

- Notes:**
1. 24VDC output setting required when EL or QEL device connected
  2. If installing board in location 2 or 3, rotate board 180°
  3. When powering (2) QEL's with a PS902, both cannot be activated at the same time, they must be sequenced.
  4. Latchbolt retraction of (2) sequenced QEL's requires more than 1 second to complete.
  5. For double door QEL applications with auto operators, it is recommended to use a PS904, 906, or 914 power supply.

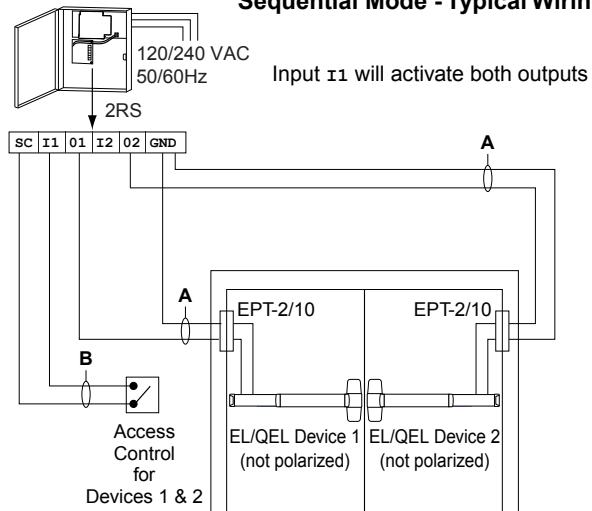


## 2 CONNECT WIRING TO 900-2RS OPTION BOARD

### Individual Mode - Typical Wiring



### Sequential Mode - Typical Wiring



### Wire Table

| Device Type  | Wire Ga (AWG) | Distance (max. ft.)* |         |
|--|---------------|----------------------|---------|
|  |               | Output A             | Input B |
| EL Exit Device with EPT or Door Loop (PS914 Power Supply Required)     | 12            | 200                  |         |
|  | 14            | 100                  |         |
| EL Exit Device with Electric Hinge/Pivot (PS914 Power Supply Required) | 12            | 150                  |         |
|  | 14            | 75                   |         |
| QEL Exit Device with EPT or Electric Hinge                             | 12            | 800                  |         |
|  | 14            | 500                  |         |
|  | 16            | 320                  |         |
|  | 18            | 200                  |         |
| Other Low Current Devices (.5 Amps DC)                                 | 14            | 500                  |         |
|  | 18            | 200                  |         |
| Other Low Current Devices (.3 Amps DC)                                 | 14            | 850                  |         |
|  | 18            | 340                  |         |
| Access Control Device  | 18            |                      | 1200    |

\* Wiring allows for 10% voltage drop at device current at 12 or 24VDC  
Max. ft = one way distance between power supply and device

### Customer Service

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