



44487031

# PS904



Power Supply

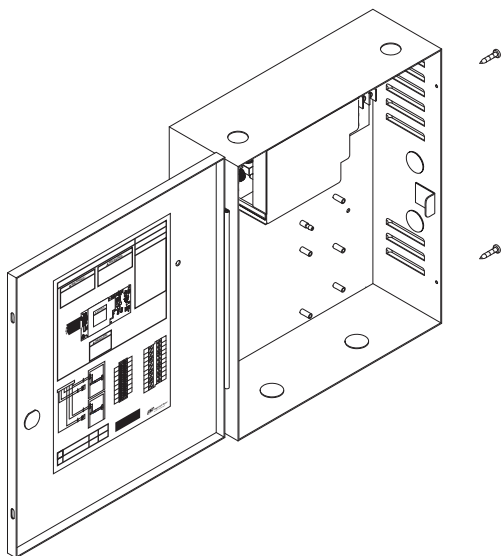
Installation Instructions



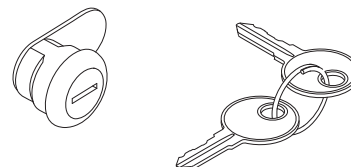
**DANGER**

To avoid risk of electric shock, turn off AC power before installing or servicing PS904 power supply

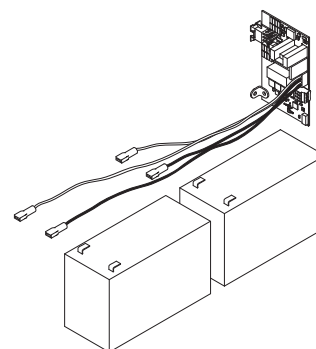
These instructions cover the following parts:



PS904 Power Supply - Pages 1-3



900-KL Keylock (optional) - Page 2



900-BB Battery Backup (optional) - Page 3

## PS904 Power Supply Specifications:

Input	120/240 VAC, 1.7 A, 50/60Hz, High Voltage Class 1 Wiring Required	
Output	4 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, T4A 250 VAC	<div><b>CAUTION</b> For protection against risk of fire, replace fuse with same type and rating</div>
Compliance	UL 294, ULC-S318, RoHS, & FCC Part 15, Class 2 Output	
Compatible Boards (Optional, 2 boards maximum)	900-2RS 900-4R 900-4RL 900-8F 900-8P	INST. INSTRUCTIONS - 24125007 INST. INSTRUCTIONS - 44487106 INST. INSTRUCTIONS - 44487080 INST. INSTRUCTIONS - 44487106 INST. INSTRUCTIONS - 44487106
Fire Alarm Input Board (Optional)	900-FA (Requires one option board above)	INST. INSTRUCTIONS - 44487072
Battery Backup Board (Optional)	900-BB	INST. INSTRUCTIONS - 44487064

## Mounting Notes

The PS904 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.

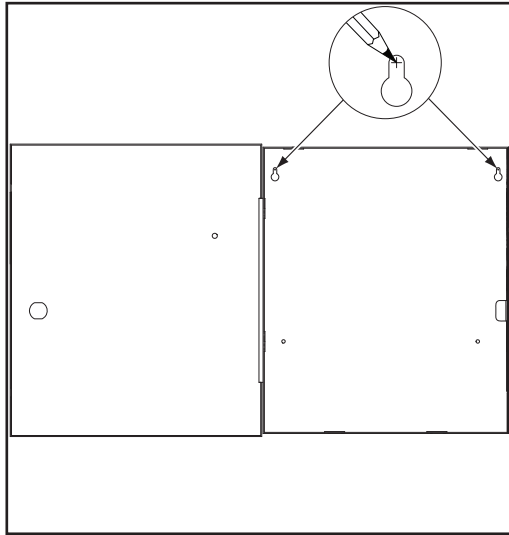
Install the PS904 indoors within the protected premises.

Check national and local codes for additional installation requirements.

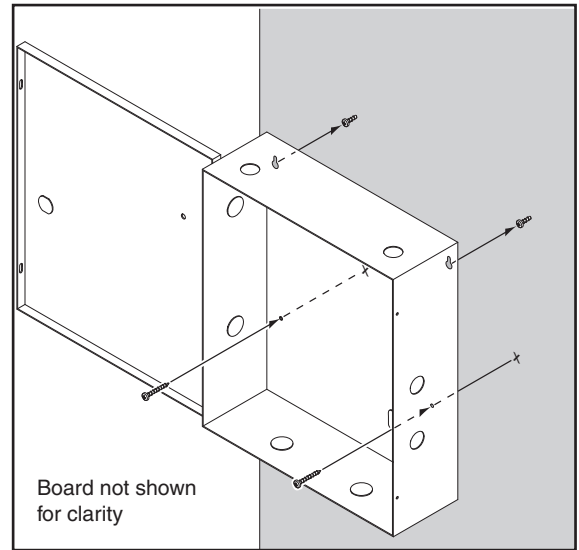
Enclosure must be firmly mounted to a solid surface using hardware suitable for the surface.

### 1 Mount Power Supply

#### 1a Mark 2 Top Holes



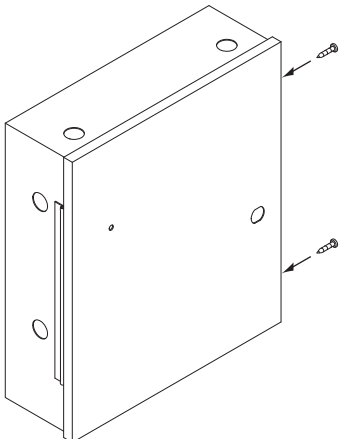
#### 1b Secure Enclosure with 4 Screws



### 2 Secure enclosure door

#### If No Keylock

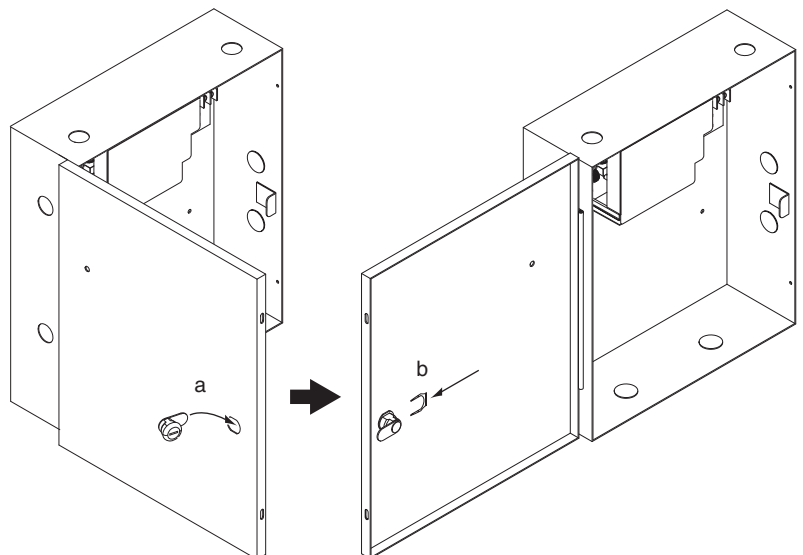
Enclosure will be secured with 2 screws as shown (done as last step)



OR

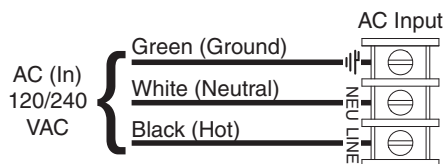
#### If Keylock

Remove knockout and insert key cylinder, then slide in clip



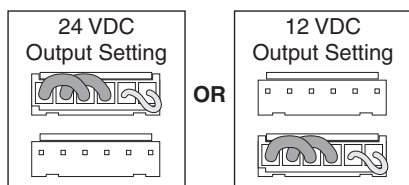
### 3 PS904 setup and testing

#### 3a Connect AC Wiring

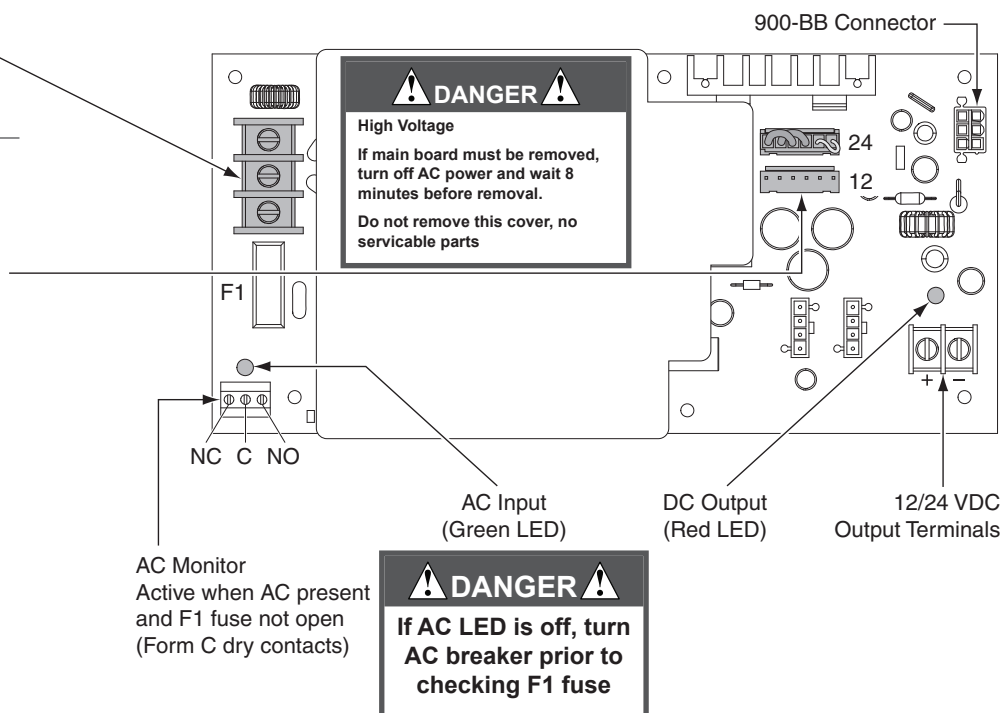


**⚠ DANGER ⚠**  
Ensure AC breaker is turned off

#### 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)

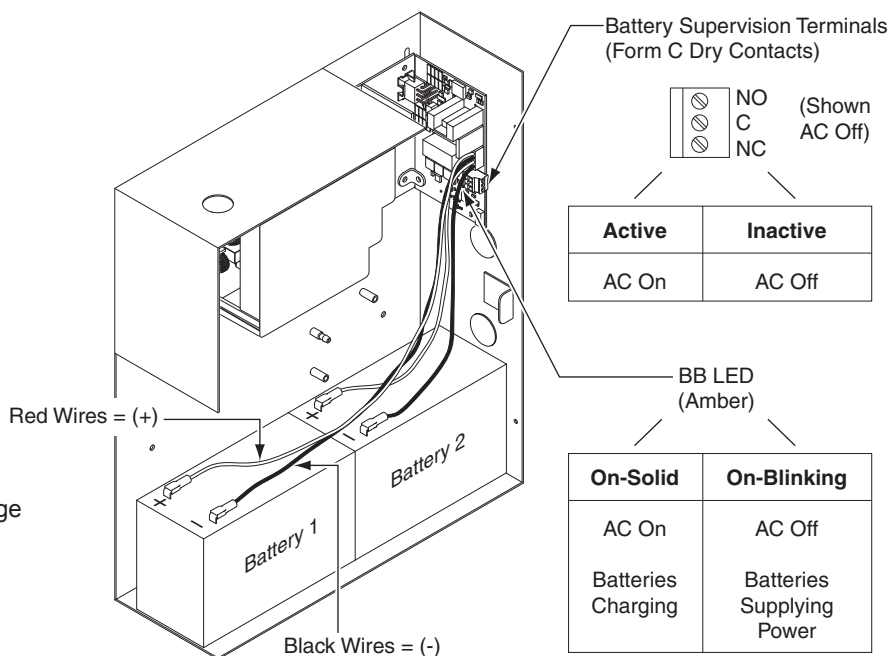
Refer to 900-BB Instructions

#### 1a Place Batteries in Box with Terminals to the Left

#### 1b Attach Wires from Battery Board

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

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

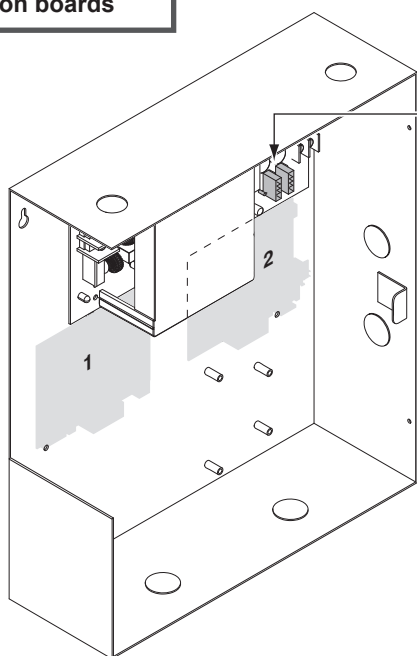
Verify BB LED (if applicable) is On = AMBER

### Option Boards

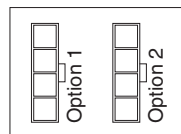
Refer to appropriate instructions if any board shown below is factory-installed



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

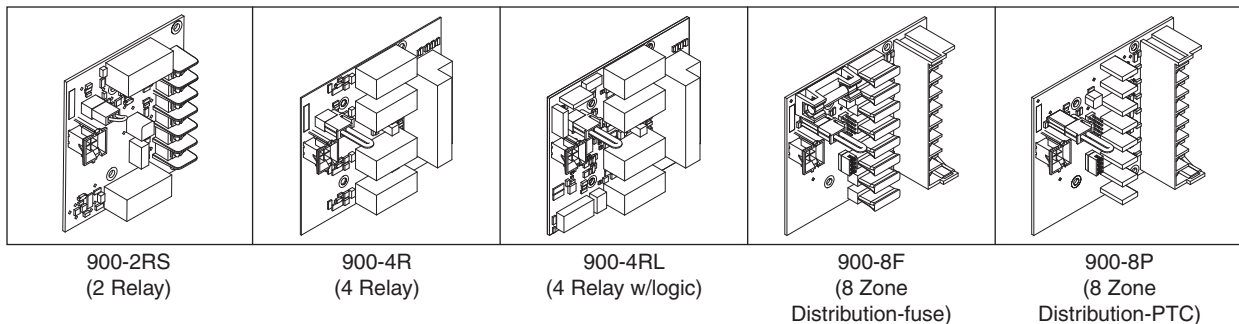


**Option Boards may be Plugged  
into either Option  
Connector**



• See option board installation instructions  
for wiring info

Available option boards:



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

### Customer Service

1-877-671-7011

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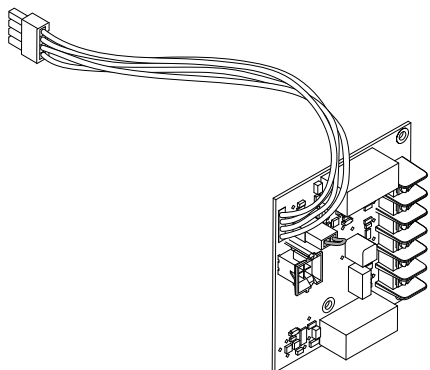
# 900-2RS



Option Board

Installation Instructions

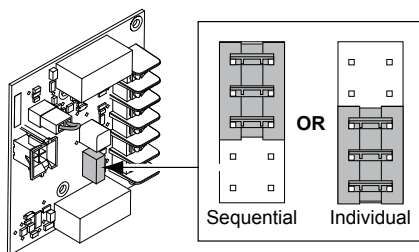
## 900-2RS Specifications:



Inputs I1 , I2	Dry contacts required (Closed = Active) 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)

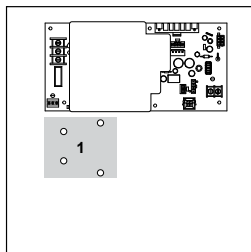
### 1a Use Jumper to Select Function



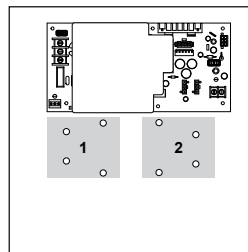
#### ⚠ DANGER:

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

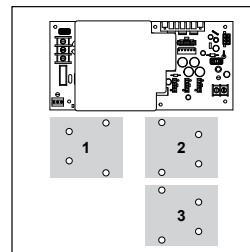
### 1b Review Available 900 series Option Board Mounting Locations (Gray)



PS902

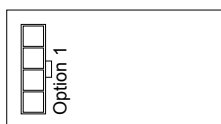


PS904  
PS914

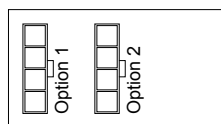


PS906

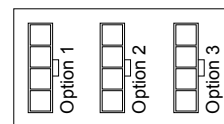
### 1c Plug 2RS Cable into any Available Option Connector



PS902  
1 Board



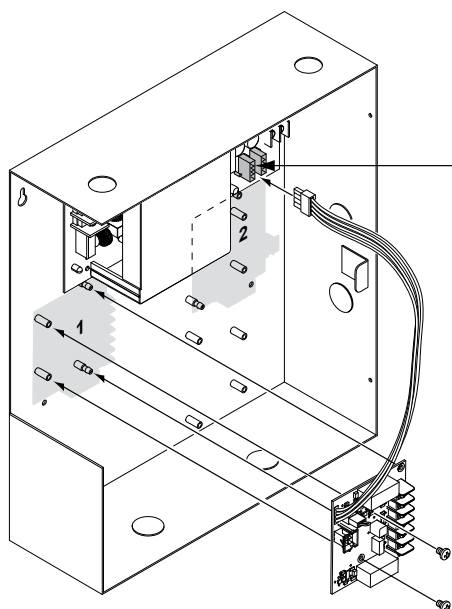
PS904, 914  
2 Boards



PS906  
3 Boards

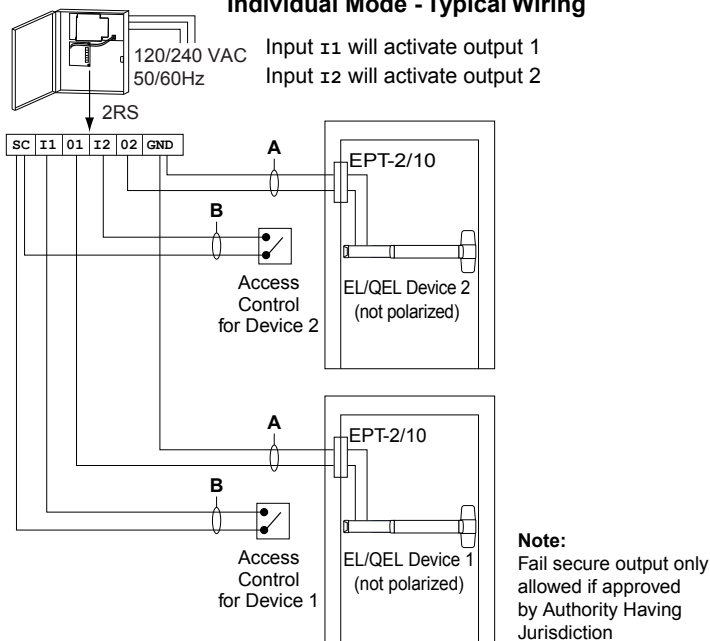
### 1d Secure Board with Screws

- 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.

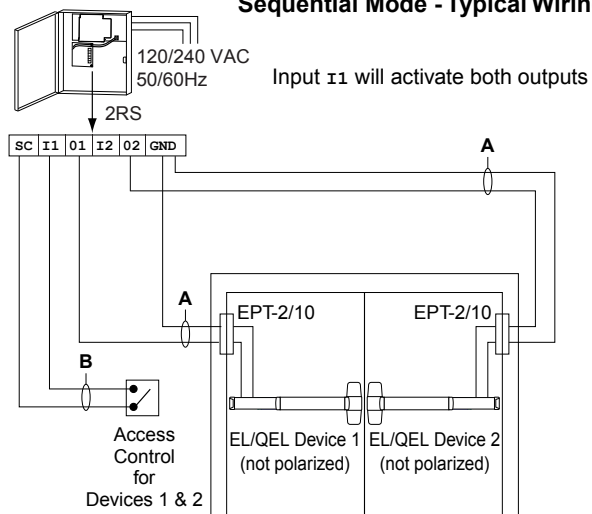


## 2 CONNECT WIRING TO 900-2RS OPTION BOARD

### 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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