



44487114

PS914-RFK

VON DUPRIN®

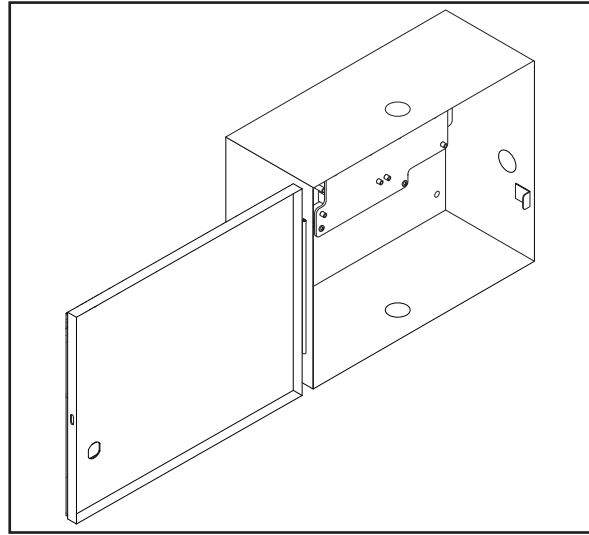
Installation Instructions

These instructions include the following items:

▲ DANGER:

To avoid risk of electric shock, turn off AC power before installing or servicing PS914-RFK.

PS914-RFK to be installed by licensed electrician



PS914-RFK can only replace the PS873 and may require one of the following option board configurations:

EXISTING	CROSS REFERENCE
PS873	PS914-RFK
PS873 x 871-2	PS914-RFK x 900-2RS
PS873 x 873-BB	PS914-RFK x 900-BB
PS873 x 871-2 x 873-FA	PS914-RFK x 900-2RS x 900-FA
PS873 x 873-FA	PS914-RFK x 900-8F x 900-FA
PS873 x 873-4TD	PS914-RFK x 900-4RL
PS873 x 873-AO	PS914-RFK x 900-4RL
PS873 x 873-SI	PS914-RFK x 900-4RL
PS873 x 871-2Q	PS914-RFK x 900-2Q

The following boards are NOT available with the new PS914-RFK:

PS873-AL	n/a
PS873-AC	n/a
PS873-DE	n/a

Input	120/240 VAC, 1.4 A, 50/60Hz, High Voltage Class 1 Wiring Required	
Output	For use in 2 Amp DC, 12/24VDC May be used to power Von Duprin & Falcon device at 24VDC, 16A, 300ms	
Temperature Range	32°-120° F (0°- 49° C)	
Fuse	F1, T6.3A, 250VAC	▲ CAUTION: For protection against risk of fire, replace fuse with same type and rating
Compliance	UL 294, ULC-S318, RoHS, & FCC Part 15, Class 2 Output	
Compatible Option Boards (2 max)	900-2RS 900-4RL 900-2Q 900-FA/900-8F	INST. INSTRUCTIONS - 44487056 INST. INSTRUCTIONS - 44487080 INST. INSTRUCTIONS - 44487098 INST. INSTRUCTIONS - 44487072 / 44487106
AC Monitor Output	Form C Contacts, 30VDC, 1 Amp, Resistive Load	

Customer Service

1-877-671-7011 www.allegion.com/us



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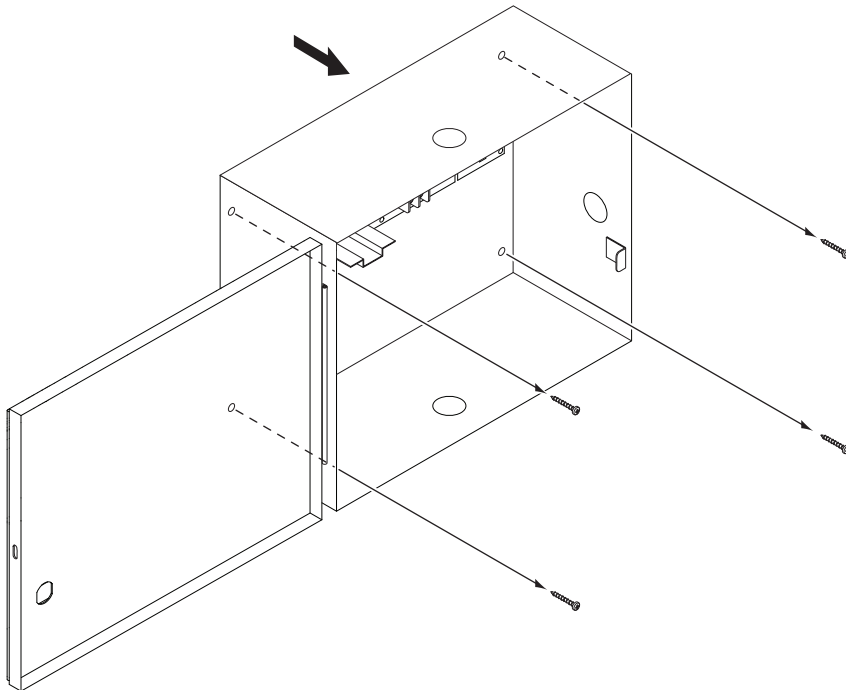
1 Turn off AC breaker and confirm there is no voltage on AC wiring

⚠ DANGER:
Ensure AC Breaker is Turned Off

2 Disconnect AC input from existing PS873 power supply

3 Label all field wiring and then disconnect

4 Remove existing box



Mounting Notes

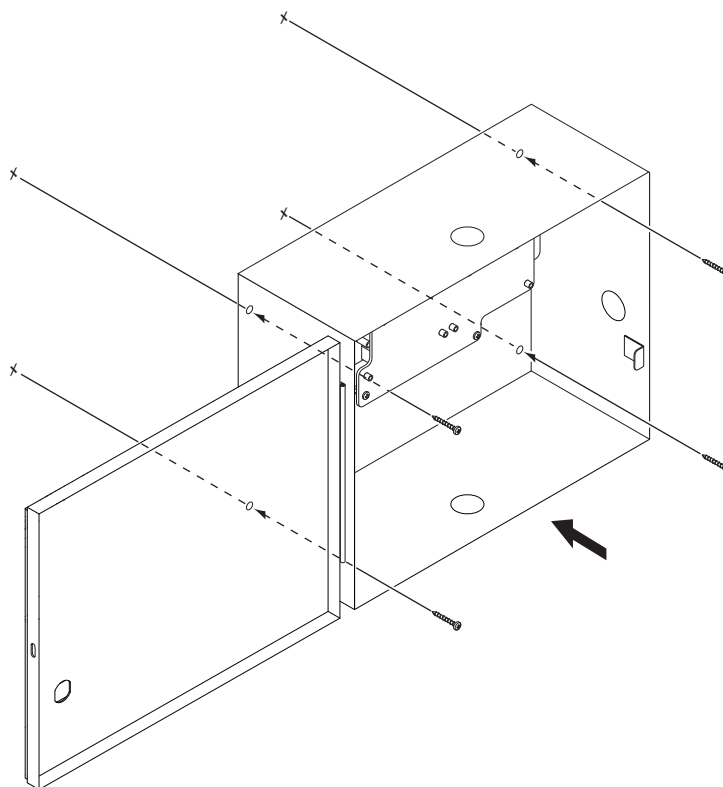
The PS914-RFK must be installed in accordance with the article 760 of the National Electrical Code or NFPA 72, Canadian Electrical Code, or any other applicable codes.

Install the PS914-RFK indoors within the protected premises.

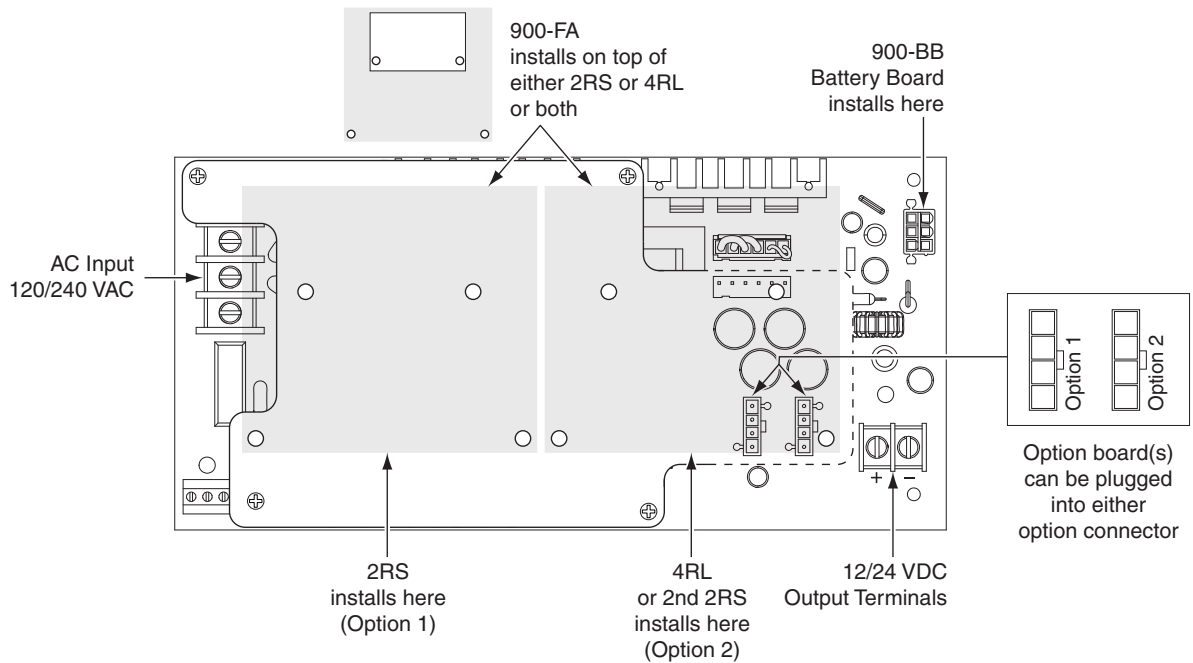
Check national and local codes for additional installation requirements.

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

5 Install PS914-RFK



6 Install new option boards (if applicable)



7 Connect field wiring

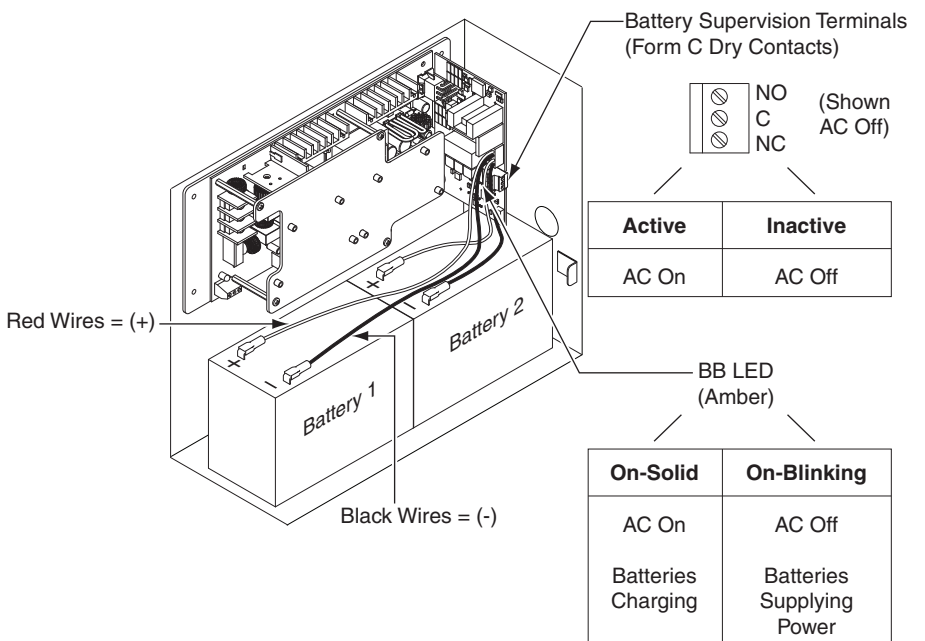
- For 12/24 VDC output terminals, see drawing in Step 6
- For 871-2 (900-2RS) option board, see page 5
- For 4TD (4RL) option board, see page 6
- For AO (4RL) option board, see page 7
- For SI (4RL) option board, see page 8

8 Install 900-BB battery backup (if included)

8a Place Batteries in Box with Terminals to the Left

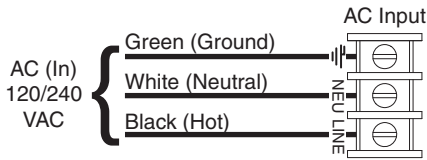
8b Attach Wires from Battery Board

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



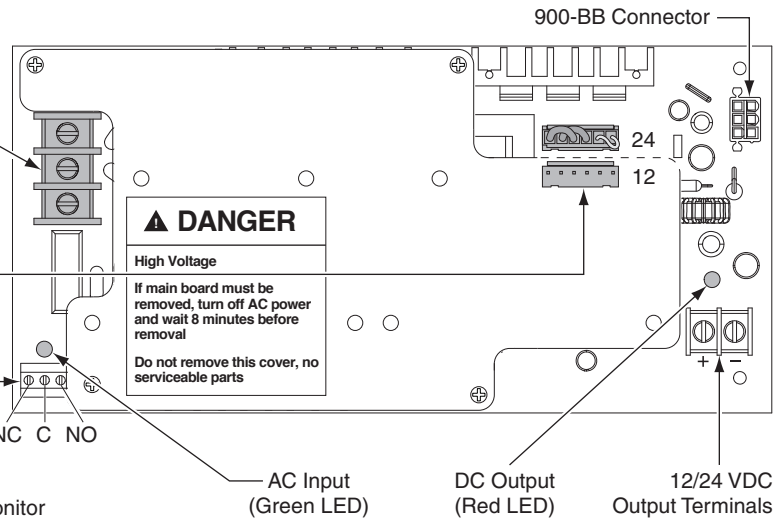
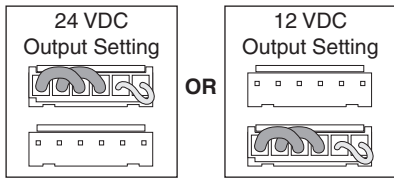
Note: Allow 24 hours for batteries to fully charge

9a Connect AC Wiring



⚠ DANGER:
Ensure AC Breaker is Turned Off

9b Use Jumper to Select 24 VDC or 12 VDC Output



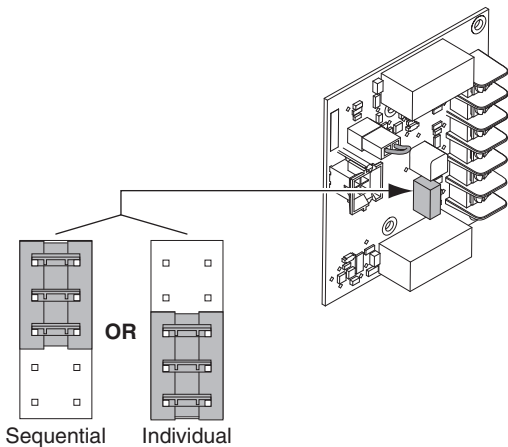
9c Turn On AC Breaker to Test Power Supply

- Verify AC LED is On = GREEN
- Verify DC LED is On = RED
- Verify BB LED is On = AMBER

⚠ DANGER:
If AC LED is off, turn off AC breaker prior to checking F1 fuse

CONVERSION FROM 871-2 Configuration and Wiring to 900-2RS

- a. Determine if 871-2 was configured for Individual or Sequential. For 900-2RS, use jumper to select same function.



- b. Connect wiring per table

CROSS REFERENCE FOR WIRING CONNECTION

871-2 OLD	900-2RS NEW
SC	SC
I1	I1
O1	O1
I2	I2
O2	O2
GND	GND

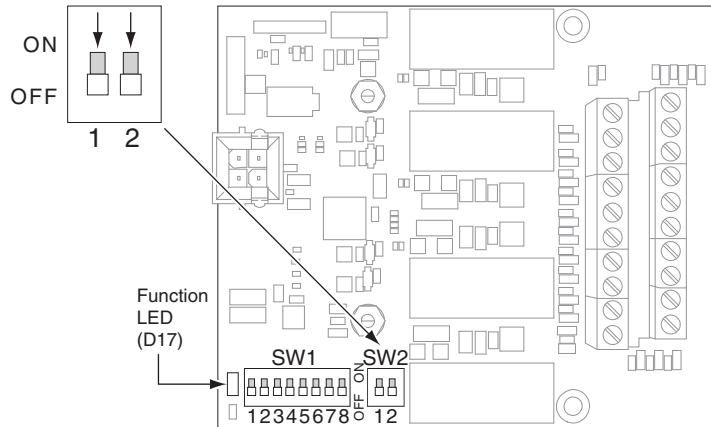
a. Choose function of 900-4RL board by setting SW2 DIP switches

Four Zone Controller Function (4TD):

Controls up to four inputs and four outputs with time delay.
This is the default setting.
Function LED will blink one time every 5 seconds.

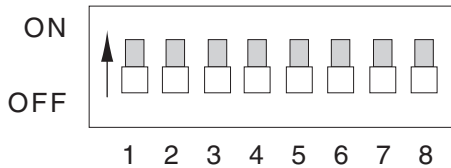
Summary of Operation

- Output turns "ON" when input is activated (closed).
- Time delay begins when input is released (opened).
- Locking Device output will remain "ON" during time delay.
- If I1-I4 inputs are wired together, outputs will sequence.



b. Set time delay using SW1 DIP switches

DIP switches on SW1 can be turned "ON" by moving them in the direction that the arrow is pointing. Switches are shown here in the "OFF" position.



	SWITCH NUMBER	4TD DIP SWITCH DEFINITIONS All switches shown in "OFF" position in wiring diagram
Enable Time Delay Allows you to choose which outputs will have the below time delay.	1	Turn "ON" to enable time delay for Locking Device 1
	2	Turn "ON" to enable time delay for Locking Device 2
	3	Turn "ON" to enable time delay for Locking Device 3
	4	Turn "ON" to enable time delay for Locking Device 4
Set Time Delay (0-75 seconds, 5 second increments) 0 Sec: Switches 5-8 "OFF" 75 Sec: Switches 5-8 "ON"	5	Adds 5 seconds to the time delay when "ON"
	6	Adds 10 seconds to the time delay when "ON"
	7	Adds 20 seconds to the time delay when "ON"
	8	Adds 40 seconds to the time delay when "ON"

CROSS REFERENCE FOR WIRING CONNECTION

873-4TD OLD	900-4RL NEW
SC	SC
I1	I1
O1	NO1/NC1
I2	I2
O2	NO2/NC2
GND	GND
GND	GND
I3	I3
NO3	NO3
C3	C3
NC3	NC3
I4	I4
NO4	NO4
C4	C4
NC4	NC4

c. Connect wiring per table (at right)

NO = fail secure output
NC = fail safe output

CONVERSION FROM AO Configuration and Wiring to 900-4RL

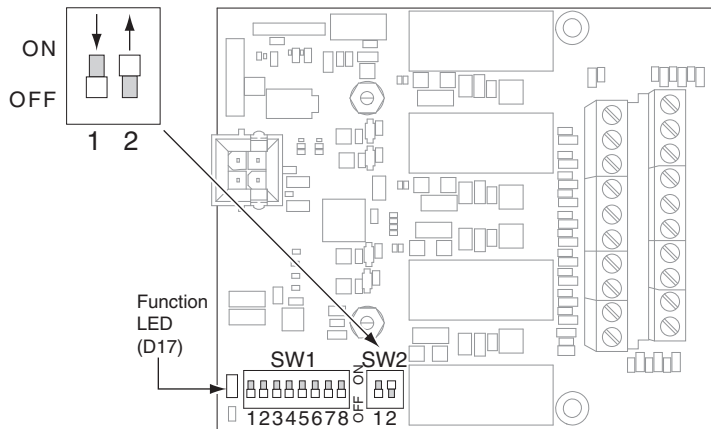
a. Choose function of 900-4RL board by setting SW2 DIP switches

Auto Operator Function (AO):

Coordinates the unlocking of one or two zones with the signaling of an auto operator.
Function LED will blink two times every 5 seconds.

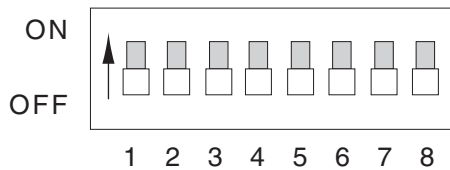
Summary of Operation

- Output turns "ON" when input is activated (closed).
- Time delay begins when input is released (opened).
- Locking Device output will remain "ON" during time delay.
- If I1-I4 inputs are wired together, outputs will sequence.



b. Set time delay using SW1 DIP switches

DIP switches on SW1 can be turned "ON" by moving them in the direction that the arrow is pointing. Switches are shown here in the "OFF" position.



CROSS REFERENCE FOR WIRING CONNECTION

	SW1 SWITCH NUMBER	AO DIP SWITCH DEFINITIONS All switches shown in "OFF" position in wiring diagram
Set Auto Operator Signaling Option Determines when the auto operator signal will be active	1 Off 2 Off	Operator is signaled when latch monitor switch becomes active. Monitor switch required
	1 On 2 Off	Operator is signaled 0.5 seconds after control switch becomes active. No monitor switch used.
	1 Off 2 On	Operator is signaled 1.0 seconds after control switch becomes active. No monitor switch used.
	1 On 2 On	Operator is signaled 1.5 seconds after control switch becomes active. No monitor switch used.
Not Used	3	Not used
Set Individual Mode or Sequential Mode Individual Mode - One input will trigger one locking device. Sequential Mode - One input will trigger two locking devices.	4	Turn "OFF" (default) to enable Individual Mode (single doors). Turn "ON" to enable Sequential Mode (double doors).
	Set Time Delay* (0-30 seconds, 2 second increments) 0 Sec: Switches 5-8 "OFF" 30 Sec: Switches 5-8 "ON"	
	5	Adds 2 seconds to the time delay when "ON"
	6	Adds 4 seconds to the time delay when "ON"
	7	Adds 8 seconds to the time delay when "ON"
	8	Adds 16 seconds to the time delay when "ON"

873-AO OLD	900-4RL NEW
SC	SC
I1	I1
O1	NO1/NC1
I2	I2
O2	NO3/NC3
GND	GND
GND	GND
I3 (N/A)	I3 (N/A)
NO3	NO2
C3	C2
NC3 (N/A)	NC2 (N/A)
I4 (N/A)	I4 (N/A)
NO4 (N/A)	NO4
C4 (N/A)	C4
NC4 (N/A)	NC4 (N/A)

NO = fail secure output
NC = fail safe output

c. Connect wiring per table (at right)

2nd output signal to auto operator (not used for PS914-RFK)

CONVERSION FROM SI Configuration and Wiring to 900-4RL

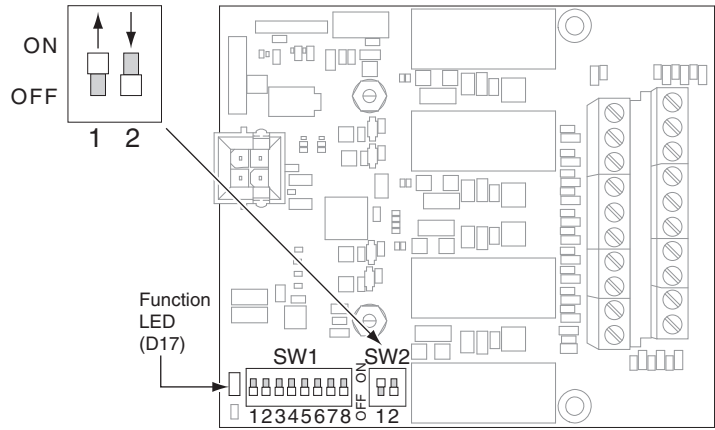
a. Choose function of 900-4RL board by setting SW2 DIP switches

Security Interlock Function (SI):

Controls multi-door interlocks. Two through six door systems are possible (additional boards required for three to six doors.)
Function LED will blink three times every 5 seconds.

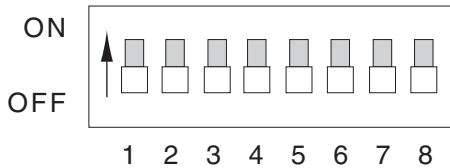
Summary of Operation

- Output turns "ON" when input is activated (closed).
- Time delay begins when input is released (opened).
- Locking Device output will remain "ON" during time delay.



b. Set time delay using SW1 DIP switches

DIP switches on SW1 can be turned "ON" by moving them in the direction that the arrow is pointing. Switches are shown here in the "OFF" position.



CROSS REFERENCE FOR WIRING CONNECTION

	SWITCH NUMBER	SI DIP SWITCH DEFINITIONS All switches shown in "OFF" position in wiring diagram
Enable Time Delay Allows you to choose which outputs will have the below time delay.	1	Turn "ON" to enable time delay for Locking Device 1
	2	Turn "ON" to enable time delay for Locking Device 2
Enable Interlock	3	Turn "ON" to remove O2 from interlock (Allows a single independent door)
	4	Turn "ON" for global interlock (interlocks with other SI boards that have this switch "ON")
Set Time Delay (Output Active)* (0-30 seconds, 2 second increments) 0 Sec: Switches 5-8 "OFF" 30 Sec: Switches 5-8 "ON"	5	Adds 2 seconds to the time delay when "ON"
	6	Adds 4 seconds to the time delay when "ON"
	7	Adds 8 seconds to the time delay when "ON"
	8	Adds 16 seconds to the time delay when "ON"

873-SI OLD	900-4RL NEW
SC	SC
I1	I1
O1	NO1/NC1
I2	I2
O2	NO2/NC2
GND	GND
GND	GND
I3	I3
NO3	NO3
C3	C3
NC3	NC3
I4	I4
NO4	NO4
C4	C4
NC4	NC4

NO = fail secure output
NC = fail safe output

GLOBAL INTERLOCK SWITCH SETTING EXAMPLES						Application
SI Board #1		SI Board #2		SI Board #3		
SW1-3	SW1-4	SW1-3	SW1-4	SW1-3	SW1-4	
Off	Off	Off	Off	Off	Off	Each SI board is a standalone, 2-door interlock.
Off	On	Off	On	Off	On	6-door interlock by setting all boards "global".
Off	On	On	On			A three-door interlock, plus an additional independent door on output 2 of SI Board #2.
Off	On	Off	On	Off	Off	4-Door interlock (SI Board #1,2) and a standalone 2-door interlock (SI Board #3).

c. Connect wiring per table (at right)

NOTE: WHEN INSTALLATION IS COMPLETE, SECURE ENCLOSURE DOOR WITH SCREW OR KEYLOCK